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Srovnání kolektivního investování v Číně a USA
Comparison of Collective Investment in China and in the USA

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BOGLE, John C. *Common Sense on Mutual Funds*. London: Wiley, 2009. 607 p. ISBN 978-0470138137.
CECCHETTI, Stephen and Kermit SCHOENHOLTZ. *Money, Banking, and Financial Markets*. New York: McGraw-Hill, 2014. 752 p. ISBN 978-0078021749.
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The declaration

“I hereby declare that I have elaborated the entire thesis including annexes myself.”

Ostrava date.....03.5.2017.....

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1 Introduction

This thesis focuses on comparison of collective investment in America and China. We all know there is no doubt that nearly a hundred years of development history of US mutual fund is the world's largest and most mature markets. According to the ICI's data, until the third quarter of 2009, global mutual fund assets had reached \$ 22.38 trillion, the United States accounted for 55 percent, and China, as one of the most developing countries in the world, although has only developed 10 years since its first open-end fund, but its development speed has surpassed the United States in recent years, so that's why China and USA have comparability.

The second chapter is divided into five parts. In the first part, it will introduce what is collective investment, the history of collective investment, the type of collective investment, and its characteristics and distinctions, fund raising and risk. In the second part and third part, and it will describe the collective investment market industry in China and in USA, and describe its history and origin.

The fourth part is the most important part, and it's the core of this thesis, because collective investment is a very big range, in order to make it specifically, this thesis choose mutual fund which is a major part of collective investment as a representative. In this part, it compares the mutual fund between China and USA through the fund fees, marketing channel, total size of the fund market, the proportion of mutual fund assets, the composition of fund holder, the proportion of index fund assets in the whole stock assets, investors' age and investors' objectives.

The last part is conclusion. It summarizes preceding part of the thesis and put forward some suggestions to promote the development of China's fund industry.

2 Characteristic of collective investment

Collective investment as a way of investment, are more and more popular, the characteristics of collective investment is represented by:

- Get property capital from investor. Investor's contribution is the premise of the formation of the set investment plan;
- The investor's contribution, profit and increment are allocated together and independent. The role of the collective investment is to pool the funds of the investor, to achieve the necessary scale of diversified operation and efficient operation, to carry out specialized investment management, to provide differentiated investment opportunities to investors and to disperse risks;
- The collections of property are used for the predetermined investment, Risks are taken by investors, and investment incomes are allocated to other investors. As a financial product, the Portfolio investment plan achieves the value of assets by investing.

2.1 Definition of collective investment

Collective investment refers to put funds which are provided by many *small investors* together and form a collection of assets, then delegate to professional investment institutions as assets manager to make management and operation, prior agreement by both parties about benefit, professional investment institutions will collect up investment funds to stock, bonds, securities or other business, and according to both agreed way of benefit, distribute profit and loss. Collective investment instruments include public offerings, private equity funds and other financial products in form of companies, partnerships, trusts. In simple word, it means bankers create an investment to put investors' money together and then reinvest in financial market, it can be called as collective investment, and it is a way of *indirect investment*.¹

2.2 History of collective investment

The development of the investment fund industry can date back to the 1860s' Europe.

¹ Reference: <http://wiki.mbalib.com/wiki/%E9%9B%86%E5%90%88%E6%8A%95%E8%B5%84>

Thanks to the industrial revolution, the middle class in Britain accumulated a huge amount of money. Along with the empire reaching its power elsewhere in the world, the excess capital began to flow into other continents as well. To avoid the high risk investing in alien capital market directly, they entrusted the investment affairs to those who were more familiar with local conditions, more reliable and had more experiences. The Foreign and Colonial Government Trust formed in 1868 in London and primarily investing in government bonds of the colonies overseas, was the first collective investment scheme in the world and resembled a mutual fund.

The Massachusetts Investors' Trust created in Boston, although with a size of only \$50,000, ushered in the arrival of the modern mutual fund in the United States in 1924, is the first open-end fund in the world. Afterwards, in order to protect the investors and further encourage them to invest, the government established the watchdog, Securities and Exchange Commission, in 1929, passed the Securities Act of 1933 and the Securities Exchange Act of 1934, and required the mutual funds to register with SEC and disclose the relevant information in the form of a prospectus. The enactment of the Investment Company Act of 1940 and the Investment Advisers Act of 1940 listed additional provisions to regularize the information disclosure and better align the interest of related parties. With the help of these regulations, the US mutual funds entered into a period of rapid development, and they have been particularly popular in the last 20 years.²

2.3 The advantages and disadvantages of collective investment

Collective investment is a way of investing; it has both interest and risk, therefore, this part introduces the advantages and disadvantages of collective investment.

2.3.1 Advantages of collective investment

Risk is spread and reduced

If an investor just buys the same stock for many shares, once the stock price decrease, investor will lose his investment fund, but as for collective investment, investors can invest

² Reference:<http://baike.baidu.com/item/%E6%8A%95%E8%B5%84%E5%9F%BA%E9%87%91#3>

into various types of financial instruments, even though one of them is loss, investors can still get profit from other shares. This will make loss less , it means risk is reduced, on the other hand, because these investment funds is formed by many small investors, if investment cause a loss, the loss will spread in the group.

Funds are cost effective

One single investor's investment is small, but collects many investors' funds, they will get a large number of funds, and some fees like management fees will spread among these investors, therefore the cost every one affords is not therefore expensive.

Funds offer access to retail/individual investors

If individual investors don't know any professional knowledge, it is not a good ideal for them to directly invest, but they can entrust money to expert, and let them manage money, therefore collective investment make access to individual investors.

Strict regulation of funds

Funds benefit from institutional safety, which means they are heavily regulated and supervised.

2.3.2 Disadvantages of collective investment

Risk

Although collective investment can spread and reduce risk, it still exist risk, this is the common point of investment. The main risks include credit risk, interest rate risk, inflation risk, reinvestment risk, management risk, liquidity risk. The details are introduced in part 2.6.

Fees

Investors should pay the fees including purchase fee, redemption fee, and management fee.

Lose financial freedom

Investment funds are strictly regulated by management company and the portfolio managers.

2.4 Classification and distinction

Because of the history of countries, social-economic, cultural and other different environment, investment funds show a variety of forms, therefore the classification of national funds are different, the following part introduces the classification commonly used, and the distinction of corporate and contractual funds; open-end fund and close-end fund.

2.4.1 Classification

The American Investment Company Institute stipulate that the investment funds are divided into long-term funds (capital market funds), short-term funds (money market funds) two basic types by investment objective, long-term funds can be divided into two kinds of stock funds, bonds and income funds, short-term funds can be further divided into tax money market funds and tax-free money market funds , according to the American Investment Corporation Association statistics, the current US investment fund species has 33 kinds.³ But because the classification criteria are different, investment fund species classification is cross-repeated, therefore we cannot expect a standard to make the investment fund division clears, therefore this thesis gives an overview of the classification of investment funds.

³ Reference: <https://www.ici.org/>

Table 2.1 Classification of investment funds

Classified by organization	Corporate funds Contractual fund
Classified by transaction	Closed-end funds Open-end funds
Classified by investment risk and profit	Positive growth funds Growth funds Growth and income funds Income funds Balanced type
Classified by investment object	Equity bonds Balanced funds Specialty funds Money market funds Bond funds
Classified by investment plan variability	Fixed funds Semi-fixed funds Financing fund
Classified by other standard	Domestic funds Foreign funds Dollar funds Yen funds Charge funds No charge funds

Source:<https://zh.wikipedia.org/wiki/%E8%AF%81%E5%88%B8%E6%8A%95%E8%B5%84%E5%9F%BA%E9%87%91#.E5.88.86.E7.B1.BB>

This thesis will concentrate on the most important two classification standard, corporate funds and contractual fund; closed-end funds and open-end funds.

2.4.2 Distinction

According to the different forms of investment funds, investment funds can be divided into two types, contract and corporate. The United States is the representative of Company-based investment funds; Japan is the representative of contract-based investment funds.

Corporate investment fund

Corporate investment fund is established according to the *company law*, for the purpose of profit, through the issuance of fund shares, collect the funds and invest in a variety of securities investment institutions. In other words, investors buy shares in this company as subscription fund and become a shareholder of the company, with its shares, investors can enjoy return. Important matters should be discussed and decided by the board.

Corporate fund features: the establishment procedure of fund company is similar to general joint-stock company, fund company itself registered as corporate according to law, but what is difference to general joint-stock company is that it is commissioned by a *professional financial consultant* or *management company* to management and administration, fund company's organizational structure is similar to the general joint-stock company, with the board of directors and general meeting of the holders, the assets of the fund hold by the company, investors are shareholders in the company, taking risks and exercise their right through shareholder's meeting.⁴

Contractual investment fund

Also known as unit trusts, refers to an investor, manager, trustee, though *signing a contractual fund contract*, issuing beneficiary certificates, contractual fund originates in England and then are very popular in Hong Kong, Singapore, Indonesia and other countries, no regulations of the fund and board, but by the fund contract to regulate the behavior of the three parties. *Fund manager* is responsible for the Fund's administrative operations. *Fund trustees* is the assets holder of the fund, is responsible for the custody and disposition of the assets of the Fund, supervise on the fund manager's operation.⁵

⁴ Reference: <http://baike.baidu.com/item/%E5%85%AC%E5%8F%B8%E5%9E%8B%E5%9F%BA%E9%87%91>

⁵ Reference: <http://baike.baidu.com/item/%E5%A5%91%E7%BA%A6%E5%9E%8B%E5%9F%BA%E9%87%91>

The difference between corporate and contractual funds

Firstly, the *legal basis* is different. Corporate funds are formed in accordance with the company law, has corporate capacity. Contractual funds are formed in accordance with the fund contract, trust law is the basis for its establishment, and the fund itself has no legal qualifications.

Secondly, the *nature of the funds* is different. Corporate funds are raised through the issuance of common stock in corporate capital. Contractual funds are raised through issuance of fund units of the trust property.

Thirdly, *investors' position* is different. After contractual fund investors buy fund shares, investor will become one of the contract parties, the investor is not only the trustee of the fund, who trust in the fund manager and entrust their money to fund manager to operate and manage, but also the beneficiary of the fund; after corporate fund investors buy fund shares, investors will become the company's shareholders. Therefore, contractual fund investors do not have administrative powers of the fund's assets. Corporate fund' shareholder can join the general meeting to exercise company's management power.

Fourthly, *financial channels* are different. Corporate fund has corporate capacity, therefore company can borrow money from bank ,it is better for expanding the assets' scale, company's development is guaranteed by enough capital; contractual fund has no corporate capacity, therefore generally contractual fund don't borrow money from bank.

Fifthly, *operation mode* is different. Corporate investment funds usually entrust underwriters or dealers to raise money, which is because they have a lot of advantages about selling stock, it make stock sales quickly. Of course, a fee must be paid to underwriters and dealers. As for contractual fund, investor can become a beneficiary as long as buy beneficiary certificate. In the fund's operation, corporate fund is as same as general joint-stock company, unless the company go bankrupt, generally speaking fund companies are perpetual, this help company's stable development. From the macroeconomic point of view, fund companies are not free established and terminated, this makes contribution to a national securities market's stabilization and economy smooth development. Due to contractual investment fund establishing and operating based on the *trust contract*, with termination of the contract, fund operation also on terminated, this is not helpful for long-term business, and also bad to the

stabilization of securities market.⁶

The common point between corporate and contractual funds

In terms of the commonality of two types of funds, whether it is a corporate investment fund or a contractual investment fund, it involves three parties: *the beneficiary of the fund or the investor of the fund* (the investor of the corporate investment fund includes the investor of the fund company And the fund company two levels, here refers to the first level), *the fund manager*, that is fund management company (some fund itself is the fund management company), *the fund custodian*(the fund custody company). From the development trend of the world fund industry, the corporate investment fund has more tendency to converge with the contractual investment fund expect the contractual fund has fund company organization.

Close-ended fund

In accordance with the different ways of trading, investment funds can be divided into closed-end investment funds and open-end investment funds. close-end fund refers to the total capital of the fund and the number of shares issued has been *determined before the release*, after the completion of the issue and within the prescribed period, no matter what circumstances happened, the total capital of the fund and the number of shares are *fixed*, unchanged, because closed-end investment funds and beneficiary certificate *cannot be added, subscription or redemption*, investors can only sell and buy fund through *securities brokers* in the stock exchange, therefore it was called the public trading investment fund. The unit price of a closed-end investment fund is based on the net asset value of the fund, but changes with the change in the supply and demand of the securities market, or is higher than the net asset value (premium) or lowers than the net asset value (discount).⁷

Open-end fund

Open-end investment fund refers to the total amount of funds and the total number of shares is not fixed, but can *issued new shares at any time* according to market supply and demand situation or investors redeemed, because total amount of the fund's capital *can be added at any time*, also known as the additional investment fund.⁸

According to the above definition, since the total amount of the fund's shares can be

⁶ Reference: <http://www.cngold.com.cn/newtopic/20161011/gsxjjqyjjqb.html>

⁷ Reference: <http://baike.baidu.com/item/%E5%B0%81%E9%97%AD%E5%BC%8F%E5%9F%BA%E9%87%91>

⁸ Reference: <http://baike.baidu.com/item/%E5%BC%80%E6%94%BE%E5%BC%8F%E5%9F%BA%E9%87%91>

changed at any time due to changes in market supply and demand. If the new share is purchased, the company will have more funds to invest. If the holdings of the fund are redeemed, the total amount of the fund's investment will be reduced, resulting in changes in the assets of the base investment portfolio. If the fund's redemption share is too large, and exceed the normal cash reserves, the fund management agencies need to sell the securities in their hands to exchange for cash. Open-end investment fund trading price is *determined by the fund's net asset value plus fee*, because the total capital of the fund changes according to market supply and demand changes, the trading price can definitely respond the net asset value.

The difference between open-end fund and close-end fund⁹

Firstly, *development history is different*. Closed-end investment funds are earlier than open-end investment funds, in the initial stage of the securities investment fund history, people always want more stable fund, at same time, because of lacking a good market environment, closed-end investment fund first appeared. In the 20th century, the stock market speculative activities become popular, many closed-end funds are also involved in speculation and fraud. In the economic crisis in 1929, many closed-end investment funds have closed, and then open investment funds began to gradually achieve the main position in the stock market.

Secondly, *the term is different*. The closed-end funds usually have *fixed closed period*, usually more than 5 years, generally 10 years to 15 years, limit can be appropriately extended by beneficiary's meeting after authorities agreed, the open-end fund has *no fixed term*, and investors can redeem the fund unit from fund managers.

Thirdly, *the variability of capital scale is different*. The main difference between closed-end investment funds and open-end investment funds is whether the share of the fund can be *redeemed*, or whether the size of the fund's capital can be *changed*, the share of the closed-end investment fund cannot be redeemed, and the total capital is fixed; and the share of open-end investment funds is redeemable, therefore the total capital is variable.

Fourthly, *trading ways are different*. Investors of open-end investment funds can directly buy the fund from management company or the dealer at any time, investors must use different ways to buy the fund based on the different stages of the funds. When a closed-end

⁹Reference: <https://kknews.cc/finance/2qgo4g.html>

investment fund has just been set up, investors can purchase funds at the face value or the specified price from the fund management company or the distribution agency, once the issuance is completed or the fund has been traded, the investor can only buy the fund at market price from the broker in the securities transaction. Therefore, the liquidity of open-end investment funds is higher than closed-end investment funds, and can be realized or bought at any time, is beneficial to investors.

Fifthly, *trading price is different*. Open-end investment fund trading prices *directly* reflect the value of its net assets, there will be no premium phenomenon. Investors can at least maintain their net asset value if they want to invest in these funds, this greatly *reduces* the investment risk. Closed-end investment fund trading prices changes with the change in the supply and demand of the securities market, this will make some influences to investors. For example, if the market price increases, the fund's selling price increase too, then the value of the fund's investment may increase. On the contrary, when the fund prices fall, the fund prices may fall to very low, then investors will afford its asset value loss. Therefore the investment risk of closed-end investment funds is higher than open-end investment fund;

Sixthly, *trading fees are different*. When investors invest in closed-end investment funds, they need to pay a *certain* rate of handling fees and securities transactions tax, which is different from the trading of open-end investment funds. The transaction of closed-end investment funds generally need to through the *securities firms*, therefore the cost of buying and selling closed-end investment funds is higher than the cost of open-end investment funds.

Seventhly, *the advantages and disadvantages of two fund operations are different*. For fund companies, open-end funds can increase capital at any time, fund management companies are more convenient in the acquisition of capital, therefore the scale of the fund will expand, the scale of asset expansion can bring economies of scale, it takes advantages to disperse the risk of investment, improve the average profit rate. At same time, fund management companies have to afford the obligation to buy back. This need to *retain enough cash* to meet the redemption of the fund, so that the capital of investment funds cannot be used for 100% investment, thus can affect the fund's investment income. More importantly, investors go in and go out are not good to the stability of the capital of the fund, the fund manager's investment decisions cannot be well implemented, because the open investment

funds often choose strong liquidity investment. What's more, fund cannot be used for all investment, it will affect the fund's long-term performance, closed-end investment funds, relatively speaking are more stable in the business. As a closed investment fund cannot be redeemed at any time, its assets can be used for all investment, therefore fund management companies can develop long-term investment strategy. Although the closed-end investment fund's capital changes little, has the advantages of stable operation, but limit the scale of development, especially when the development of the funds are very optimistic, the Fund cannot always add capital, it will influence long term benefits.¹⁰

2.4.3 Conclusion of the classification

Four basic types of funds described above through different combinations create the most common four types of funds: closed - contract investment funds, closed type and corporate type, that is closed - corporate investment funds, also known as closed investment companies, open and contract type, that is the unit trust fund, mutual funds, for the combination of the way as shown in Table 2.2, in the real economic activities, we often see investment funds portfolio, such as the most common investment funds in the United States are mutual funds, the most common investment fund in the UK is the unit trust fund, the most common investment fund in China is the closed - contract investment funds. Author makes an table as follows:

Table 2.2 Portfolio

	Close-end	Open-end
Contractual	Closed-contract investment Funds	Unit trust fund
Corporate	Closed- corporate investment funds	Mutual fund

2.5 Fund raising

Fund raising generally takes four steps, application, approval, sale, fund contract.

Issue

¹⁰Reference:<http://baike.baidu.com/item/%E8%AF%81%E5%88%B8%E6%8A%95%E8%B5%84%E5%9F%BA%E9%87%91/374>
6

Fund issuance refers to the investment fund management company after the fund issue application approved by the relevant departments, sell the fund beneficiary certificates to individual investors, institutional investors. Funds are mainly distributed in two ways:

- First, the fund management company issued by their own (direct sales). The direct sale of the fund means that the shares of the investment fund are not sold to investors through any specialized sales organization. This is the easiest way to issue. In this way of sale, the investment fund shares sold at the net asset value, bid and offer price are same, called non-charging fund;
- The other is through the underwriting agency issue (underwriting). In this way, most of the investment fund shares are sold by brokers. That is, the underwriters of the fund.

China's fund sales are mostly in this way.

Transaction

Open-end funds can only be purchased, redemption at the provisions of the state places. After the establishment of closed-end funds, fund managers, fund custodians can apply for the IPO to China Securities Regulatory Commission and stock exchange. The rules of the Fund shall be formulated by the Stock Exchange and submitted to the CSRC for approval

2.6 Risk

Securities investment fund is an investment tools that can collect capital, expert management, diversified investment and reduce the risk, but investors still face the risk of investment in the fund. The main risks of securities investment funds are represented by:

Market risk

Funds are mainly invested in the securities market, investors buy the fund, because the effective dispersion of investment and the use of expert advantage may be beneficial to control the risk compared with purchase of stocks, decentralized investment can eliminate the non-systemic risk from individual companies to a certain degree, but cannot eliminate the systemic risk of the market. Therefore, when the securities market prices influence by economic factors, political factors and other factors, will lead the changes of the level of fund income and net value, therefore it will bring risks to fund investors.

Management ability risk

Fund managers as a professional investment institutions, although have more advantages than ordinary investors in the risk management, such as a better understanding of the nature of the risk, the source and type, can more accurately measure the risk, and usually in accordance with their own investment objectives and risk tolerance to construct an effective portfolio of securities, in the case of market changes, they can timely adjust the portfolio, and control risk in the predetermined range, but different fund managers have different management level. Management tools and management techniques are different, it has an impact on the level of fund income.

Fund manager's professional skills, research ability and investment management level directly affect its possession and analysis of information, and the judge of the trend of securities prices, then affecting the level of investment income of the fund. At the same time, whether the fund manager's investment management system, risk management and internal control system are complete, and whether they can effectively prevent moral hazard, as well as the fund manager's moral level, also have an impact on the risk-return level of fund.

Technical risk

When the computer, communication systems, trading networks and other technical support system or information network have some abnormal situations, may lead daily purchase or redemption of the Fund cannot be completed or cannot be completed under the normal time limit, the registration system is paralyzed, the accounting system cannot display the net value of the fund, The Fund's investment trading instructions cannot be instantaneous transmission and other risks

Large redemption risk

This is a unique risk to open-end funds. If the market volatility or other reasons for the continuous emergence of a huge redemption, and lead fund managers have difficulties in paying cash payment, the fund investors apply for a huge amount of redemption fund shares, may encounter redemption or other risks.

Credit risk

Fund may occur issuer default and refuse to pay principal and interest, then it results in losses on fund assets.

Inflation risk

Fund investment is designed to increase the value of the Fund's assets. Therefore, if there is an inflation, the benefits that fund invests in securities may be offset by inflation.

Reinvestment risk,

The decline of market interest rates will affect the reinvestment rate of fixed-income securities' interest income.

Liquidity risk,

China's security market is a new-developing market, the liquidity risk is high. In the portfolio, there are many reasons that bond and stock face high liquidity risk and increase purchasing cost.¹¹

¹¹ Reference: <https://zhidao.baidu.com/question/1701197148007639660.html>

3 Development of China's collective investment

China's fund market is growing rapidly, there are 164 closed-end funds in the market and 2558 open-end fund in 2015, money market funds are the most popular funds in the market.

3.1 The situation of China's securities investment fund market

An Analysis of the Development of Securities Investment Funds in the New Economic Situation and Related Issues, From the UK's first fund "foreign and colonial government trust investment", the securities investment fund has had 130 years of development history, from the beginning of 1 million pounds, developing to the main capital market financial industry pillar,

China's fund market started late, from 1998 to now, has less than 15 years time, during this period, China's fund market has experienced *slowly*, development and steady growth this three stages. In 1998, the newly established Southern Fund Management Company and the Cathay Pacific Fund Management Company launched a closed-end fund with a size of \$ 2 billion, which opened the prelude to China's securities investment fund industry. In the early years of China's financial development, the emergence of securities investment funds is stable to financial market and played a significant role in promoting financial market.

Xin Chen(2003) argue that in 2003, China's fund industry has made *rapid* development; this year was called as "investment fund year." In this year, the number of fund products and fund management companies have been unprecedented development, this year had total 39 open-end fund been issued, the starting size was 67.845 billion Yuan, far than 2001's 11.7 billion Yuan and 44.8 billion Yuan in 2002. The fund product line was gradually improving, from the stock fund to the bond fund, and then to the guarantee money market funds, products series went through from high risk to low risk, provided investors with a broader fund, widely selection. As of December 31, 2003, China had 110 funds (54 closed-end funds inside) in total, four monetary funds were being issued, fund management companies were also developing quickly, in 2003, 29 fund management companies opened or waited for approval, more than the sum of past four years, at the end of the year, total number of fund management companies had reached 50, of which 37 were the Chinese companies, the other 13 were the

Sino-foreign joint venture fund management companies.

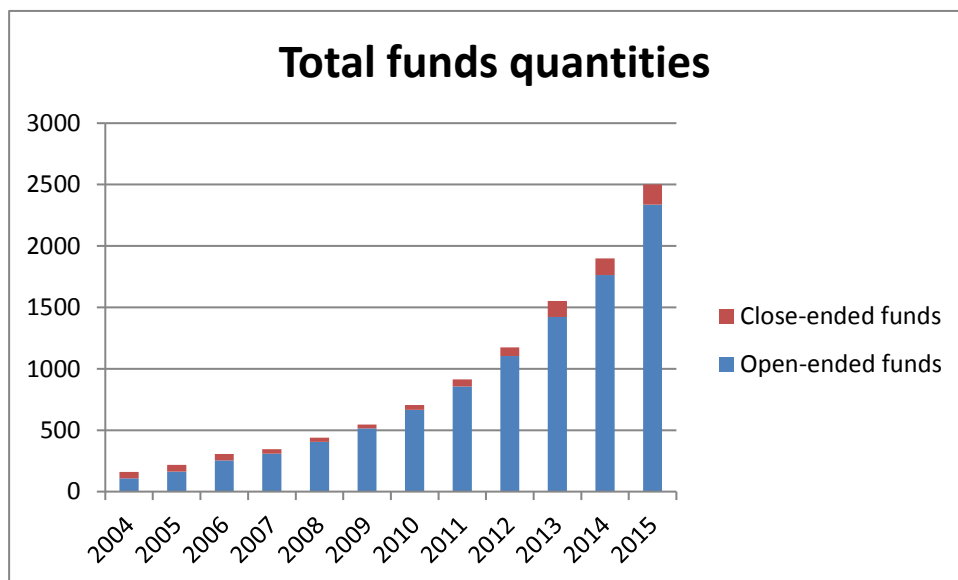
After 2003, we can see from Chart 3.1, the total funds quantities increase year after year, until the end of 2015, there are 164 closed-end funds and 2558 open-end fund in the market in 2015, compared with the amount in 2003, it is nearly 17 times as large as in 2003.

Nowadays, with the issuing of open-end funds developing quickly, China's fund has appeared some new features, here are two features:

- Number of funds and funds companies grows up rapidly

China's funds quantities increase quickly during 2004-2015, as fund industry develops very well, open-end funds account for the major part, the specific tendency is shown in the following Chart 3.1.

Chart 3.1 Total funds quantities



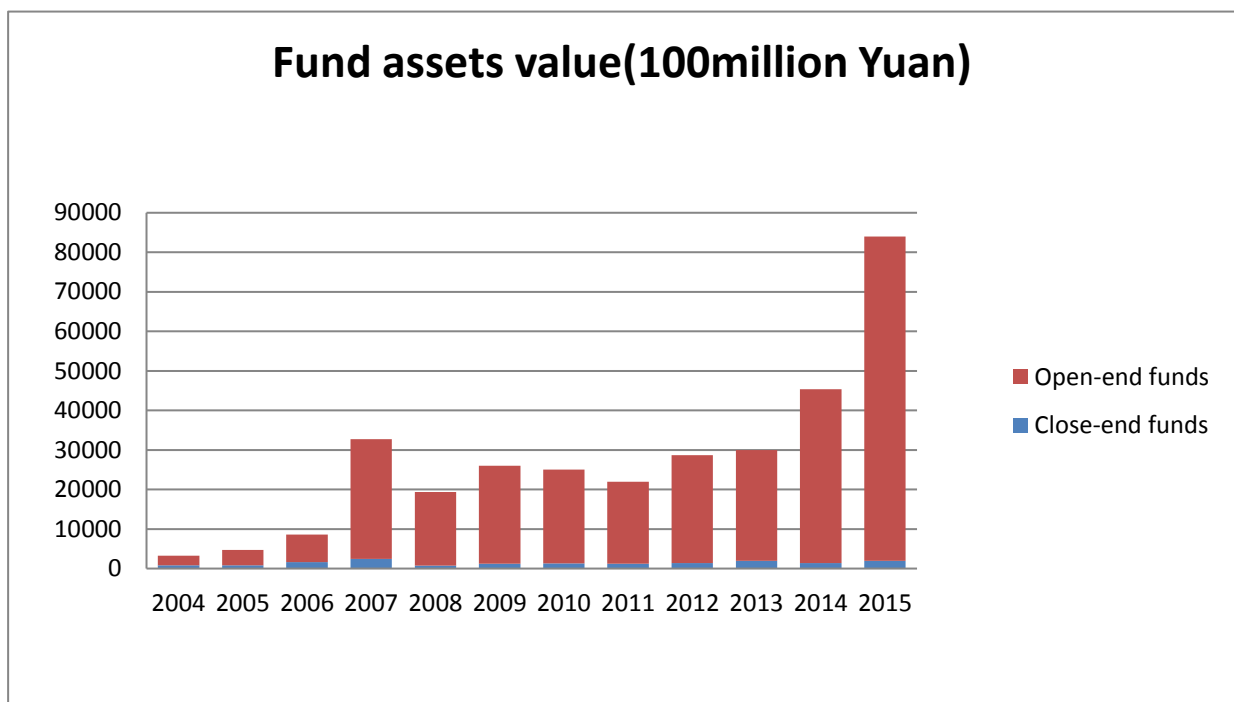
Source: <http://www.amac.org.cn/>

As you can see from the following Chart 3.1, it can be shown in the chart that from vertical, the open-end funds fund increasing far above the close-end funds, account for the most percentage in the whole funds quantity, in 2015, there are 164 closed-end funds and 2558 open-end fund in the market. It's such a big number, compared with the amount in 2003, it is nearly 17 times as large as in 2003. And compared horizontally, from 2004-2015, the total number of funds increase rapidly, especially in recent years, from 2014-2015, the total funds quantities increase from 1898 to 2502, the increase rate is 31.8%.

- Total assets value increases in total

From the period 2004-2007 the fund assets value increased gradually, because of the financial crisis in 2007 in US, China's fund assets value fell down in 2008, then after some adjustment of financial market, funds gradually came to increase stability, and growth rate increase rapidly in 2015.

Chart 3.2 Fund assets value (100million Yuan)



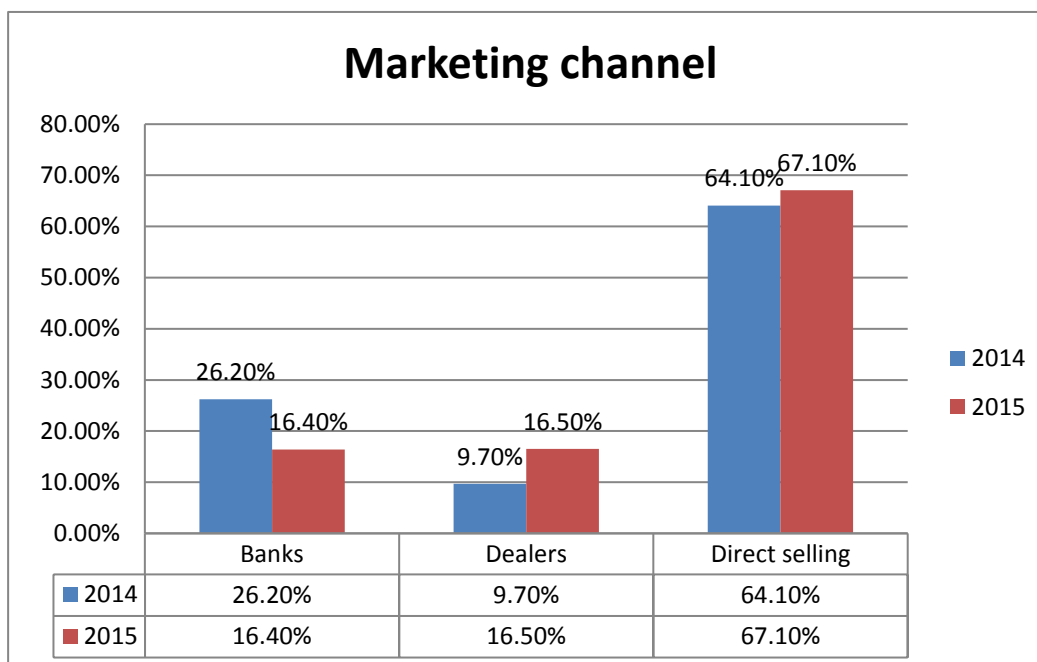
Source: <http://www.amac.org.cn/>

According to Chart 3.2, in 2015. The open-end funds assets value is 8202400million Yuan, close-end funds assets value is 194700million Yuan. In 2014. The open-end funds assets value is 4400700million Yuan, close-end funds assets value is 136600million Yuan, compare to the statistic in 2014, the increase rate of open-end funds assets value is 86.39%.the increase rate of close-end funds assts value is 42.53%, we can get result from two increase rate that open-end funds develop better than close-end funds.

3.2 Fund marketing channel

There are three ways to buy fund, investors can buy fund directly from a company or buy fund indirectly from banks or dealers, it can be shown in the chart, most of funds are selling directly, direct selling is as many as three times higher than bankers and dealers, in other word, the fees investors direct investing is lower than indirectly. We can compare 2015 to 2014, the bankers' selling decreased from 26.2% to 16.4%, dealers' selling increased from 9.7% to 16.5%, and direct selling increased from 64.1% to 67.1%.

Chart 3.3 Marketing channel

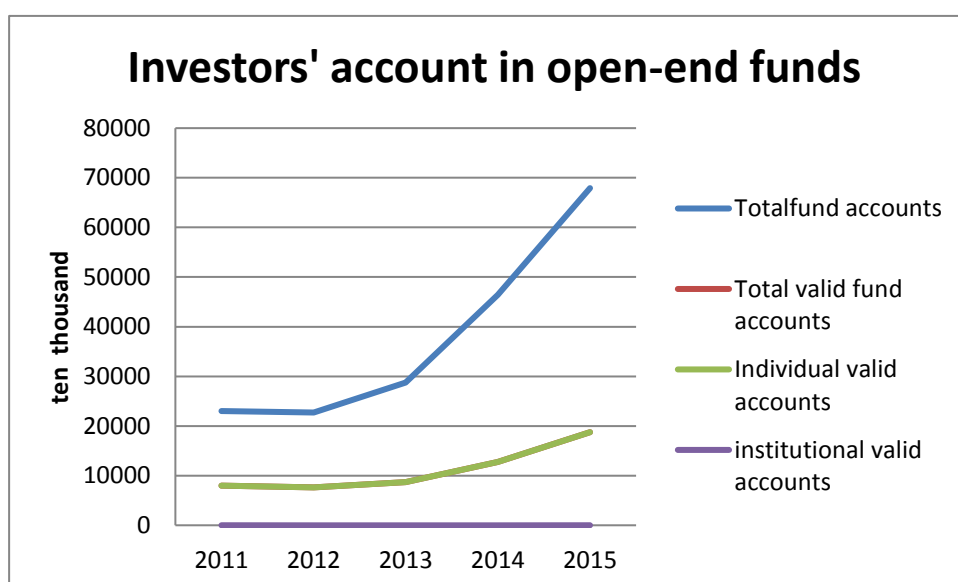


Source: <http://www.amac.org.cn/>

3.3 Investors composition

According to the "Open Securities Investment Fund Investor Structure Quarterly Report", at the end of 2015, the total number of fund accounts was 679,173,900, increase by 21,505,600 compared with the end of 2014, of which the number of valid accounts was 18.75855 million, increase by 601.97 million compared with the end of 2014, rate of increase is 47.2%, before 2013, the Fund's effective account number is relatively stable, in 2014 began to grow significantly, in 2015, the number of individual accounts continued high growth trend, rate of increase is 47.3%; number of institutions effective accounts is relatively stable, rate of increase is 1.2%.

Chart 3.4 Investors' account in open-end funds



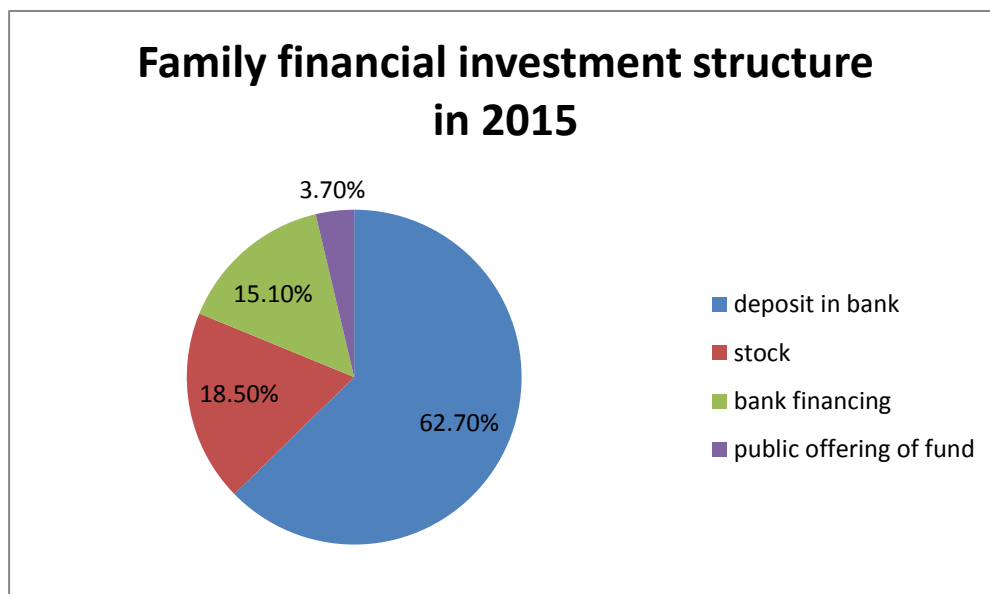
Source: <http://www.amac.org.cn/>

3.4 Family financial investment structure

Deposit in bank is 55.19 trillion Yuan, bond is 16.31trillion Yuan, public offering of fund is 3.2 trillion Yuan, bank financing is 13.3trillion Yuan, according to Chart 3.5, people are tend to save their money in bank account rather than other risky choice, although public offering of fund is less risk than stock, stock is the second choice for family, on the other side, we can say that family use just 3.7% of their income in public offering of fund, one reason is people are conservative, another reason is that fund developed slowly in China, it is not

popular as bond and stock.

Chart 3.5 Family financial investment structure in 2015



Source: <http://www.amac.org.cn/>

3.5 Some problems to face for China's funds

Compared with many developed countries, there are many unreasonable point and lack in the development of China's fund industry, mainly in the following seven points:

The internal control of fund management company has risks

China's securities investment fund industry has developed decades of years. At present, the fund management companies' quantities have reached 100, with rapid development of the market, the fund management company's internal management mechanism and other parts appear some problems.

Brain drain

Brain drain is a common situation in the securities investment fund industry, this shows that the fund management company's fund managers and investment staff generally have problem of *imperfect assessment system, incentive mechanism is not enough* and so on. To be specific, first of all, the fund manager who lacks investment experience get to work without fully assessment, investment and research staff has no enough knowledge and provide

decision basis for the fund managers, these will result in the unsatisfactory performance of fund. Secondly, due to the incentive mechanism is not enough, employees lack sense of ownership, once fund manager and investment staff have accumulated enough experiences, they would fund a better company, the large scale of brain drain has possibility to influence fund industry and make it unstably, what's more, this will influence every fund share holder's benefit.

Moral hazard

New institutional economists argue that moral hazard often refers to the people who have a free ride motivation. For fund management companies, moral hazard usually refers to the fund managers want to *maximize their benefit* to make a series of *adverse behavior* to investors. China's securities investment fund industry's fund sponsor is often the fund managers, *fund managers* are the bridge between securities investment funds and investors, the size of the risk of fund managers determine the size of the interests of investors, the larger moral hazard, the greater the loss of investors.

Therefore, from the investor level, the prevention of moral risk of fund managers is the key point in improving the trust of fund management company customers, maintaining long-term customer relationship and maintaining the reputation of the company's brand, from the company level, doing well in fund manager's moral hazard prevention and control work is an important part of the perfect fund management company system, at same time, *good risk prevention* and *control* also play a positive role in promoting the internal governance structure of the company.

Internal supervision and regulation system is imperfect

In accordance with the provisions of the company law and regulatory body, the fund management company should establish a sound organizational structure, clear responsibilities, reasonable incentives and punishment, effective supervision corporate structure, and establish a sound internal supervision and control mechanisms, make sure the fund product operates as the contract, guarantee the fund share holder's benefit, in the current market, many fund management companies are not *fully implemented* in accordance with the above provisions. The *insufficient supervision force of risk*, failed to adjust the internal control system in accordance with the policy changes, resulting in "Everbright Securities event"(August 16,

2013, due to design flaws, the arbitrage strategy system of Everbright securities strategy investment department has *mistake* of 23.4 billion Yuan worth of buying, trading volume is about 7.2 billion. On the same day, the Shanghai Composite Index rose 5.96%, PetroChina, Sinopec, Industrial and Commercial Bank of China, the Bank of China and other stocks limit up, after selling ETF and stock index futures, the company still caused a huge impact on China's A-share market, and bring a *loss* of 19.4 million Yuan to the company) and other similar events have occurred in the securities market, fully exposed the issues of internal supervision and risk prevention and control.

Securities investment funds laws and regulatory systems are not sound

Whether the securities investment fund industry has good development needs to be regulated through sound regulatory system and laws and regulations. China's current securities investment's regulatory legal system is not perfect, departmental rules and regulations are numerous, are *not close enough* to other relevant laws and regulations, the theoretical expression occupy most content, *lack of operability* in practical work, is difficult to protect the independence of the fund product investment and operation, security

In addition, in the actual operation of China's securities investment fund, in the absence of the trustee of the legal subject, as the fund custodian, he is also the role of the trustee, supervise and operate the securities investment fund. However, although the fund custodians can strengthen the risk prevention and control of the securities investment fund products through the custody of the fund assets and the effective supervision of the scope, object and proportion of the fund managers' investment operation, the *market-oriented supervision* cannot completely replace the administrative means of the supervision. Furthermore, whether domestic or abroad, practical experience have proved that relying solely national securities regulators or related enterprises to provide supervision services, is not able to manage market development. Therefore, the *imperfect of laws and regulations* system has become obstacles in the way of China Securities Investment Fund's development, this need the relevant government departments to get great concern.

People's investment awareness needs to be improved

China's fund investors are mostly formed by the *elderly*, relatively speaking, they lack relevant financial knowledge, investment idea is too old, always tend to *speculation*, it is

called "herding effect", they do not have their own independent analysis ability , and lack idea of value investment, which caused a great impact on the strategic investment in the fund, the lack of public investment awareness has significant impact on the open-end funds, people's follow redemption behavior will exacerbate the impact of fund investment strategy. At this stage, the risk caused by investors is more often in China. Therefore, investors' *ignorance* and *immaturity* will bring great risks to the stable development of the fund market.

The lack of short-mechanism in securities market results that risk of the fund is difficult to avoid

A complete stock market must have a *short-mechanism* to achieve stability. A short-mechanism is refers to the investor's actions to protect their own interests and profit when they expect that the future value of the stock market or some stocks (including short and long-term)is *decrease*. The price of the securities should be able to *reflect all the information*, especially the demand information. In the absence of a short-mechanism market, if some investors believe that a certain securities are priced too high and deviate from the actual value, once there is no short selling mechanism, their judgment information on these securities cannot be effectively reflected in the market, deviation in price cannot be adjusted, the securities prices *cannot be changed* to a reasonable direction. Therefore, China's securities market's one-way mechanism which can only do more, cannot be short greatly limits the risk management of fund companies, hinder the development of securities investment funds

4 Development of US collective investment

US fund market is the world's most mature and most developed fund market, until March 2005, the US mutual fund industry total assets have reached 80450 billion US dollars, more than the banking industry and become the *largest organization* in US financial market. In the US financial market, bank, insurance, fund are three pillars of the financial market. In addition to the United States, the fund industry in European countries, such as France, Britain, Germany have also been very popular in the financial markets, has a very important position in financial market. The fund in Asia, Japan, Hong Kong and Taiwan's is also very developed.¹²

4.1 The situation of US securities investment fund market

At the beginning of the twentieth century, only a *handful* of richest people in the United States were involved in the capital market, and most of the family finances were *bank savings*. Until 1924, the first open-end fund "Massachusetts Investor Trust" appeared in the United States, its initial portfolio includes 45 stocks with \$ 50,000 assets,

Unfortunately, in 1929, because of US *stock market crash* and the *ensuing recession*, US fund industry has been hit. Since then, the US congress has adopted a number of laws to protect investors, and monitored securities, financial markets (including the mutual fund industry). These laws mainly include: The Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Company Act of 1940 and the Investment Adviser Act of 1940.

1933 "Securities Act", required recruitment instructions must be released when the fund is raised, and described the fund itself. The Securities Exchange Act of 1934 required mutual fund sellers to be regulated by the Securities and Exchange Commission and managed by NASD's regulatory authority. NASD has rules for advertising and sales. The Investment Companies Act of 1940 and the Investment Advisor Act of 1940 are the two *most important laws* on the protection of mutual fund investors, which not only regulate the investment company but also regulate the management of the investment advisers, sellers, management of directors, managers and so on. Former SEC Chairman has said that mutual funds are

¹² Reference: https://www.ici.org/research/industry_research

supervise and regulate more detailed and in- depth than any other financial products.

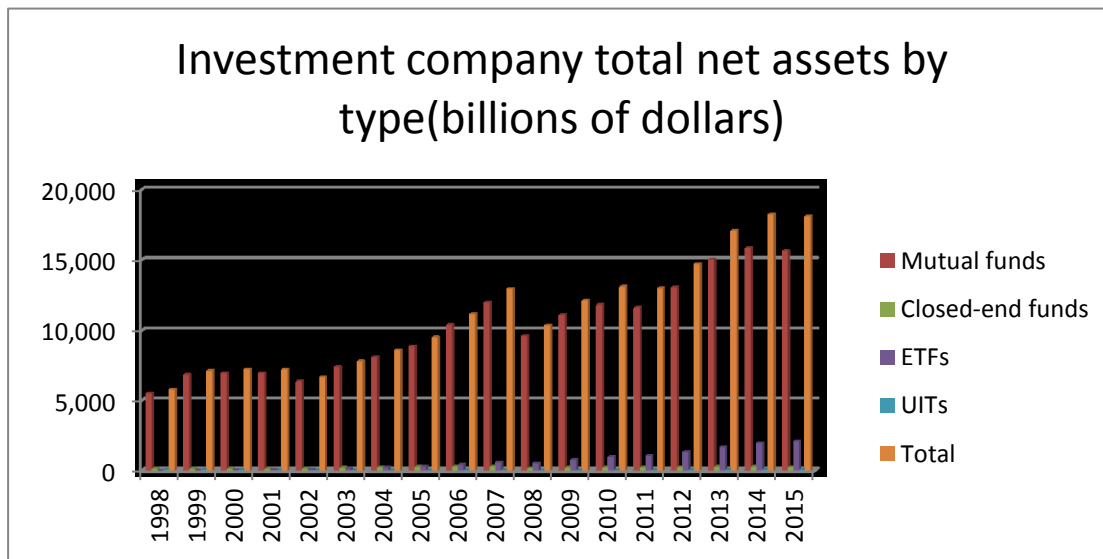
Since 1940s, mutual funds have been popularized. In 1940, there were only 80 of them, and total capital was less than 500 million dollars. After 20 years, the number of mutual funds had increased to 160, and total capital was over 17 billion dollars. At the same time, a turning point of mutual funds took place. The products and services of them tended to *diversify*, which made a huge difference in situation and scales of them. For instance, most of mutual funds were *equity funds* before 1970, and nothing but portfolios of some balanced mutual funds included some bonds. Until 1972, 46 bonds and income funds had appeared. In 1992, the number of mutual funds went further with 1629. The first money market fund was established in 1971. This kind of fund provided for their clients *higher interests* than the interests which banks offered. In the meanwhile, the revolution of retirement investment tool also played an important role in the development of mutual funds. In 1974, Employee Retirement Income Security Act (ERISA) was established, and Individual Retirement Account (IRA) appeared.

The first duty-free government bond funds appeared in 1976. After 3 years, duty-free money market funds which associated the convenience of money market funds with the tax preference of government bond funds had been formed gradually. In 1978, 401K Retirement schemes and self-employed personal retirement schemes arise, the appearance of these retirement investment tool had greatly *promoted the needs of mutual funds*. At that time, mutual funds market started to introduce more different stocks, bonds, and money market funds. Correspondingly, investors of mutual funds started to access to *more different services*, such as 24-hour telephone service, computerized account information, and so on. Nowadays, there are 8200 local mutual funds in America. They include close-end funds, exchange traded funds (ETF), unit investment trust funds, foreign mutual funds and so on.¹³

During 1998-2015, Investment company total net assets increase steadily, we can see details in Chart 4.1, it is a chart about the investment company total net assets by type.

¹³ Reference: <http://www.goomj.com/rmp/rmp691.htm>

Chart 4.1 Investment company total net assets by type (billions of dollars)



Source: http://www.icifactbook.org/ch1/16_fb_ch1

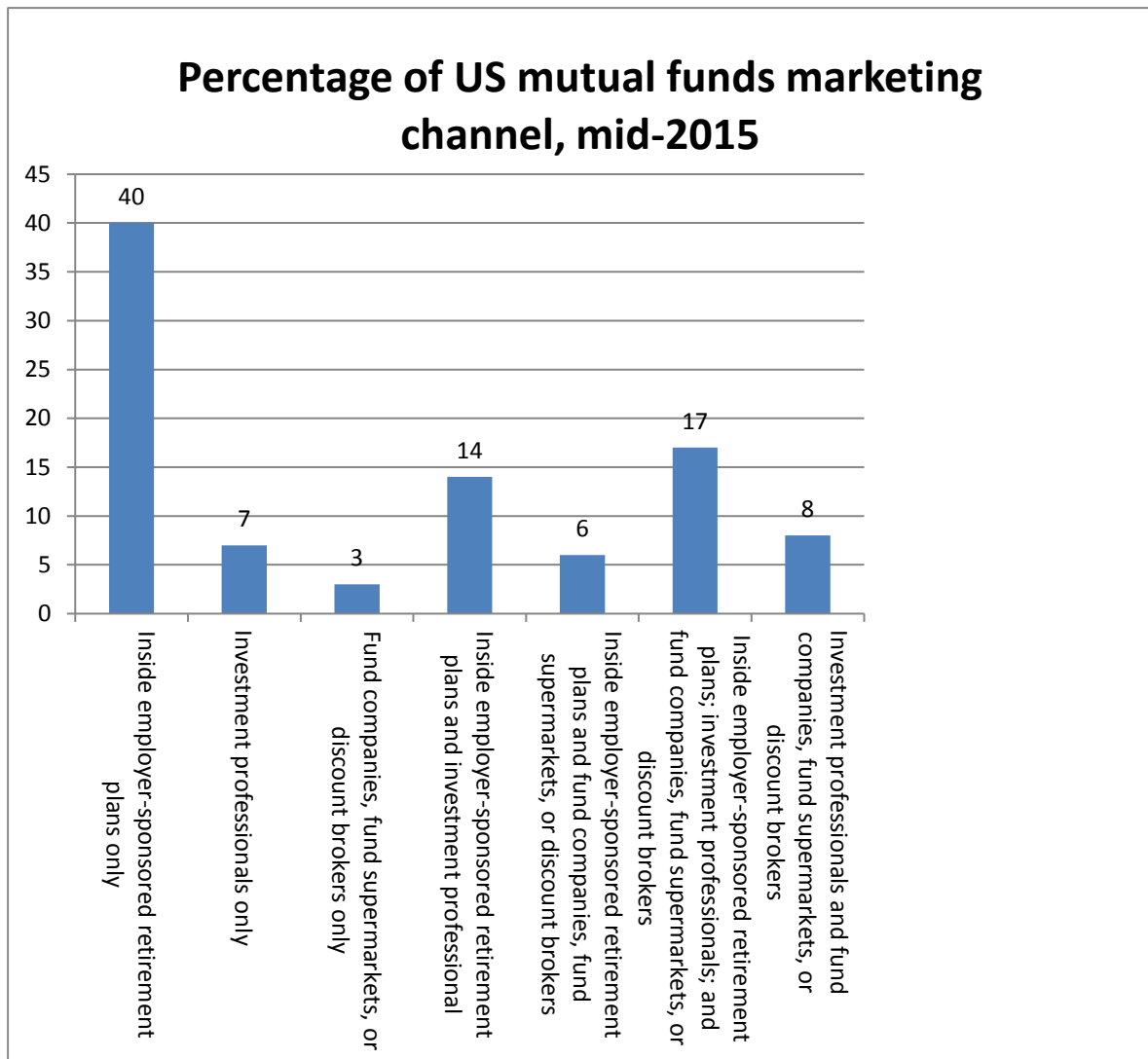
From Chart 4.1, US investment company total net assets increase in total, from 1998 to 2007, investment company total net assets increase stable, then because of the financial crisis in 2007- 2008 , investment company was being influenced, the total net assets decreased in this period, then after financial crisis, total net assets increased year after year. In detail, most assets are mutual funds, we can see from the Chart 4.1 that mutual fund account for largest proportion.

4.2 Marketing channel

The most common way to buy mutual fund is inside employer-sponsored retirement plans, compared with China, the marketing channel is varied, because China only has three kinds of channels to buy fund, from commercial bank, direct selling and broker. It is a little simple, on the contrary, US mutual funds develop very well, and it is common for people.

The following Chart 4.2 shows percentage of US mutual funds marketing channel in 2015.

Chart 4.2 Percentage of US mutual funds marketing channel, mid-2015

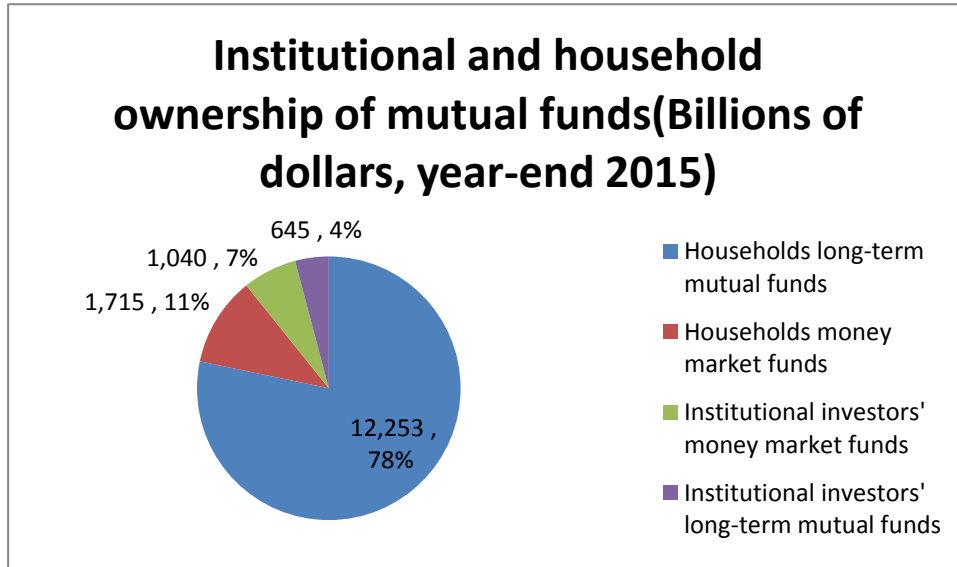


Source: http://www.icifactbook.org/ch6/16_fb_ch6

From Chart 4.2 we know that pensions accounted for about 40% percent of the fund's total assets, companies, fund supermarkets account for 3%, investment professionals account for 7%, pension plan and investment professional account for 14%, pension and fund companies, fund supermarkets or discount brokers account for 6%, pension plans, investment professional and fund companies, fund supermarkets or discount brokers account for 17%, investment professionals and fund companies, fund supermarkets, or discount brokers account for 8%.

4.3 Investors composition

Chart 4.3 Institutional and household ownership of mutual funds (Billions of dollars, year-end 2015)



Source: http://www.icifactbook.org/ch2/16_fb_ch2#investors

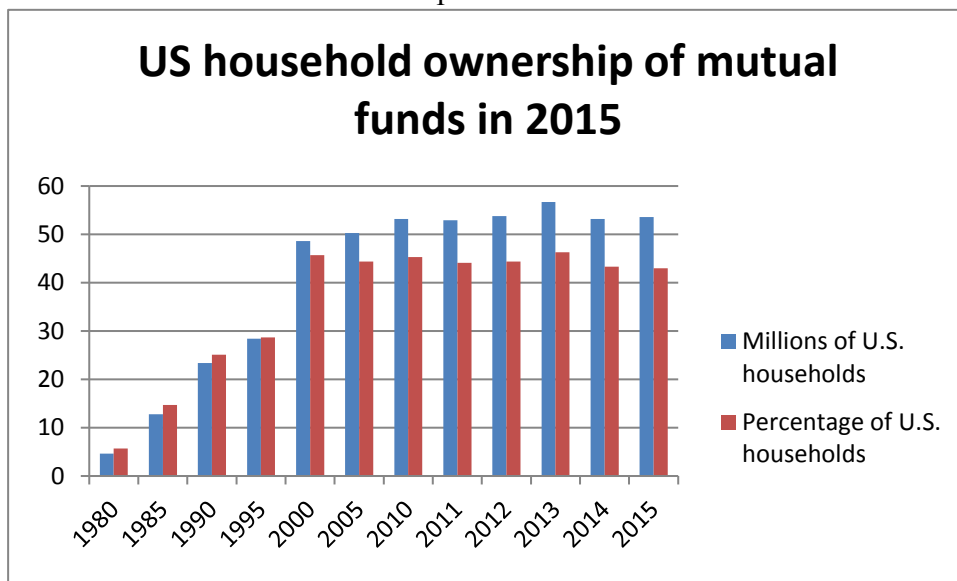
Demand for mutual funds is related to the types of investors who hold mutual fund shares. Retail investors (i.e., households) held the vast majority (89 percent) of the nearly \$16 trillion in mutual fund assets (Chart 4.3). The proportion of long-term mutual fund assets held by retail investors is even higher (95 percent). Retail investors also held substantial money market fund assets (\$1.7 trillion), but that amounted to a relatively small share (12 percent) of their total mutual fund assets.

In contrast, institutional investors such as nonfinancial businesses, financial institutions, and nonprofit organizations held a relatively small portion of mutual fund assets. At year-end 2015, institutions held about 11 percent of mutual fund assets (Chart 4.3). One of the primary reasons institutions use mutual funds is to help manage cash balances. Sixty-two percent of the \$1.7 trillion that institutions held in mutual funds was in money market funds.

4.4 Household ownership of mutual funds

From Chart 4.4, There is a increasing tendency during 1980-2000, this period is the developing period of mutual fund, we can infer that mutual fund are gradually becoming important in household, after 2000, at least 50 millions of U.S households hold mutual fund. And nearly one half of US households hold mutual fund, mutual fund has become more and more popular, and now it is an important part of family's income.

Chart 4.4 US household ownership of mutual funds in 2015



Source: <http://www.icifactbook.org/>

5 Comparison of collective investment in China and in USA

The American Association of Investment Agencies (ICI) is an association of American investment Companies. In 1940, the American Association of Investment Companies was founded in New York, at that time it was named as the National Committee of Investment Companies, 1941 renamed as the National Association of Investment Companies, in 1959, the first member conference was held. Renamed as the Association of Investment Companies in 1961 (Same as Asset Management Association of China), after collect relevant statistic data from ICI and AMAC. Based on the fund situation of the two countries at the end of 2015, there are some comparisons of fund's holder's fee, operating fee, trustee fee, and 12b-1 fee. Details are as follows.

5.1 Fund fees

In terms of subscription fee, in China, it's more than 5% of the subscription amount, the current fee level in China is between 0-2.5%, in most situation decrease with the increasing of subscription fee, most fees are front-end fees; in US, it's no more than 8.5% of the total subscription fee, front-end fees should be less than 5.3%, investors real front-end fee level is 1.1%, in generally, decrease with the increasing of holding amount, can be exempted if reach to a certain amount.

In terms of redemption fee, in China, it's no more than 3% of subscription amount, the current fee level in China is between 0-2.75%, in most situation decrease with the increasing of subscription fee, most fees are front-end fees; in US, Most fund do not charge redemption fees

In terms of management fee, in China, it's fixed rate, equity and hybrid fund are around 1.5%, bond fund is around 0.7%, money market fund is around 0.33%; in US, it has fixed rate, incentive fee rate and lever fulcrum rate.

In terms of trustee fee, it's fixed rate, equity and hybrid fund are around 0.25%, bond fund is around 0.2%, money market fund is 0.15%; in US, it's 0.1-0.2%.

In terms of 12b-1 fee, At present, there are only five money market funds charge this fee in China, rate is 0.25%; in US, it's more than 0.75% of net assets, the longer the investing

period longer, the higher the fee. The following Table 5.1 can show it directly and clearly.

Table 5.1 Difference between China and US open-end fund's fees.

Classification	Type	China	USA
Fund holder's fees	Subscription fee	$\leq 5\%$ of the subscription amount	$\leq 8.5\%$ of the total subscription fee
	Redemption fee	$\leq 3\%$ of subscription amount, usually between 0-2.75%	Most funds do not charge redemption fees
	Dividend reinvestment fee	No	Most fund do not charge fees
	Fund switching fee	Consist of the difference between two fund's subscription fee and redemption fee	Most fund do not charge fees
	Account custody fee	No	Most fund do not charge fees
Operating fee	Management fee	Fixed rate	Fixed rate, incentive fee rate, lever fulcrum rate
	Trustee fee	Fixed rate	0.1-0.2%
	12b-1 fee	0.25%	$\leq 0.75\%$ of net assets

Source: <http://www.amac.org.cn> <https://www.ici.org/>

Something to learn from USA for China: China's fund industry has only gone through just a dozen years, the time is short compared to the US fund industry's hundred years history, because of this, many aspects of China's fund industry are not perfect, one of the most prominent problem is that the management fee full charge mode is single, is still a fixed rate model, after the above-mentioned two countries open-end fund management fee comparison,

we are not difficult to get some inspiration and lessons, here are two lessons:

- The implementation of a *variant fixed rate system*, is a system when the size of the fund assets increase to a certain amount, the management rate automatically reduced to the agreed ratio, therefore, it can reduce the investment costs of investors and attract investors to join in, although, in the early stages of the development of China's fund, in the case of a small fund size, management companies only manage several funds, the higher fixed management fee system has a certain rationality, and creating a stable source of profits for the fund's continued operation, also avoid speculation, but with the development and expansion of China's fund industry, the variety of funds grows day by day, single fixed rate system can not reflect the impact of the size of the fund scale on the difficulty of operation, and the impact of the size of the management scale on the cost of managing fund, therefore, China is necessary to learn from the United States' mature approach, especially *money market fund* and *index fund*, these funds' daily management do not need more active investment in the specialized skills, the method that scale becomes larger, the rate will decrease is good for economies of scale, does not have too much influence on fund companies.
- The implementation of the *floating rate system* on the basis of fixed rate, floating rate system refers to set a appropriate performance benchmarks for a particular type of fund, when the fund performance exceeds the benchmark score, The company receives a positive performance compensation, when the fund performance is lower than the performance of this benchmark, the fund company receives a negative performance compensation, performance compensation must be *symmetrical*, otherwise it will increase speculative risk, damage the interests of investors. This kind of charging system is helpful to reflect the investment level of the fund manager and promote the competition among the industry. The technical difficulty of this method lies in the establishment of benchmarks for performance comparison, especially the performance benchmarks of stock funds, the different technical methods of various funds rating agencies result in the differences in fund performance. Therefore, it is a good choice starting with *bond fund*, and gradually expanded to the stock funds

5.2 Marketing channel

The following Table 5.2 introduces the difference between China and US open-end fund's marketing channel, from six parts: channels, main investors, supplier, means of exchange, fund provided and service.

Table 5.2 Difference between China and US open-end fund's marketing channel

Country	Channels	Main investors	Supplier
US	Direct selling	Personal investors	Fund company
	Enquiry agencies	Personal investors	Dealer bank
	Pension fund	Pensioner	Corporate and government who offer the pension
	Supermarket	Personal investors registered investment advisers	Discount house
	Institutional investor	Enterprises, charities, financial institution government	Fund company
China	Direct selling	Institutional investors	Fund company
	Commercial bank	Personal institutional investors	Bank
	Securities dealer	Personal institutional investors	Securities

Table 5.3 Difference between China and US open-end fund's marketing channel

Country	Means of exchange	Fund provided	Service
US	Send instruction to Fund company via mail, phone and call-center	Fund company who sells the fund	Investment information
	Send instructions to trading service providers, then the providers transmit to fund company	Fund from several fund company	Investment information, suggestions and constant help, purchase other fund from other company in one account
	Send instructions to corporate and government then the providers transmit to fund company	Selected fund company	Investment information
	Send instructions to discount house then the providers transmit to fund company	Fund from several fund company	Investment information, purchase other fund from other company in one account
	Directly contact fund company	Fund company who sells the fund	Investment information
China	Send instruction to Fund company via fax, phone and Internet	Fund company who sells the fund	Investment information and suggestions
	Send instructions to emissions bank	Fund commissioned	Investment information, purchase other fund from other company, etc.
	Send instructions to emissions bank	Fund commissioned	Investment information, purchase other fund from other company

Source: <http://www.galaxyasset.com/articlefilepath/jjxsqd.pdf>

According to ICI's classification, the United States mutual fund currently has five main types of sales channels; they are (individual) *direct sales*, *enquiry agencies*, *pension plans*, *fund supermarkets* and *institutional investors*. In the above-mentioned channels, after

calculate the fund assets, enquiry agencies accounted for the largest share.

It is shown in the Chart 4.2, in 2015, pensions accounted for about 40% percent of the fund's total assets, companies, fund supermarkets account for 3%, investment professionals account for 7%, pension plan and investment professional account for 14%, pension and fund companies, fund supermarkets or discount brokers account for 6%, pension plans, investment professional and fund companies, fund supermarkets or discount brokers account for 17%, investment professionals and fund companies, fund supermarkets, or discount brokers account for 8%. Here, individual direct sales and institutional investors refer to as "direct sales". In the above five sales channels, requiring agencies, pensions, and fund supermarkets are selling through the third-party intermediary. Investors only face intermediaries, intermediary agencies subscribe funds from the fund company and then sell fund to investors.

In direct marketing, mutual fund companies are not responsible for advising investors on investment, and investors need to choose their own funds according to their own judgment. The fund company that adopts direct outlet channel will usually have internet and telephone service center, provide fund account inquiry, transaction processing, fund financial report and other services to investors. Because these service centers have a *high fixed cost*, the fund that sells through the direct sale channel will normally request the investor to maintain a certain balance on the fund account, otherwise will add *extra service charge*. The so-called institutional investor channel, which is divided by ICI, refers to those institutions that buy funds with their own funds, because mutual fund companies generally design special fund shares for institutional investors, and give preferential benefits from the rates.

Consulting sales channels include a variety of *intermediaries*. Consultants in these institutions will help customers analyze their investment objectives and risk tolerance, and then give the investment proposals. Under the way of consulting sales, the consulting agency is the intermediary between the fund company and the investor, responsible for the investor's account management and distributing fund recruiting book, fund financial report to the investor. The fund company will allocate a certain proportion of marketing expenses paid by the investor in the way of purchase fee or 12b-1 fee to the consulting sales channel. Pensions are administered and being offered service by the third-party intermediary, pensions are paid by the employer to pay for the third-party services, some are extracted a certain proportion

from the 12b-1 fee of the fund. For the fund supermarket, because it's mostly providing non-subscription fees and a wide variety of funds, it is generally not responsible to provide investment advice for investor, investors need to analyze and compare and choose the fund.

As intermediaries, the fund supermarket manages the investor's account and is responsible for distributing the fund's information disclosure to the investor. The fund will typically extract a portion of the 12b-1 fee to the fund's supermarket as a sales fee, but some funds are allocated to the Fund supermarket from other non-marketing expenses. From Table 5.2, we can see that the advantage of the United States mutual fund sales channel system is a high degree of specialization. It is shown in Chart 5.2, the advantage of the United States mutual fund sales channel system lies in the *high professional division of labor*. Multi-level distribution channels fully exert their professional advantages, enabling the fund companies to gain more potential investors, and also enable investors to choose the type and level of fund marketing services that suit their needs and preferences. For example, some investors are willing to get help from full-time brokers and financial advisers, while others prefer the way of making their own decisions, or buy funds directly from the fund company, and some investors may think it is more convenient and cheap to buy funds through the fund supermarket

China's open-end fund sales are divided into *fund companies direct sales* and *commercial banks, brokers*. From the share of sales point of view, according to Chart 3.3, in 2015, the fund company direct sales is in the main position, accounting for 67.1%, brokerage accounted for 16.5%, banks accounted for 16.4%.

China's fund companies generally have a *direct sales center*, mainly located in the company headquarters and some central cities, and some companies establish branch offices to get involved in direct marketing. Direct sales staff will provide some financial advice to some institutional customers and some high-level individual customers, and provide transaction costs discount or relief. At the same time, many fund companies also directly provide online transactions and telephone transactions to the general individual customers.

In China's financial system, *commercial banks* dominate most of the financial resources, commercial bank has many network branch and customer than other financial institutions, which determines the commercial banks was still the main channel of fund sales for a long

period. Banks sale funds through the network, telephone banking, self-service terminals, online banking, etc. but in recent years, *direct marketing* and *brokerage* has gradually replaced the commercial banks, consignment banks will generally provide investment information to customers, when a variety of funds are selling at the same time, account managers will also provide financial advice to their high-end customers. Fund companies will generally return a certain percentage of the subscription fees, trailing commission, sales service fees (similar to 12b-1 fee) and other ways as the bank's marketing costs.

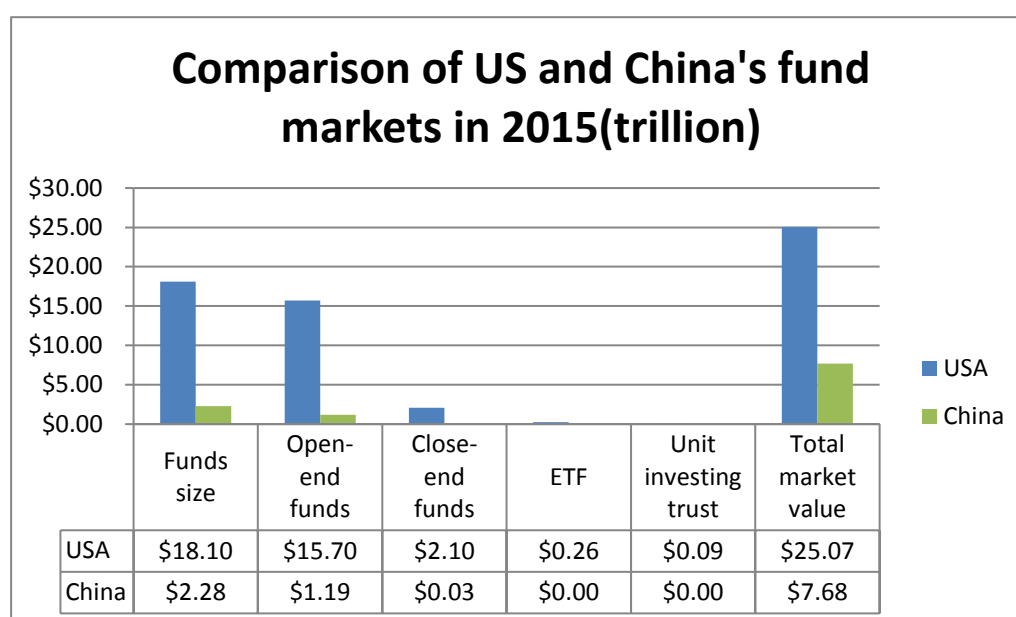
Brokerage channels have become increasingly prominent, the current domestic broker do better in the *fund's consultative sales* than banks. Compared to banks, brokers have more advantages in the service capacity, professional advice, electronic transactions, and market awareness. In the part of payment and distribution of selling fees, is basically same as bank. After the launched of "*SSE Fund*" and the open of Shenzhen Stock Exchange's open-end fund exchange within the subscription and redemption, part of the brokerage business department will develop to become a fund supermarket.

Although China has initially established a multi-level open-end fund marketing channel system, compare to those in America, there are still a lot of drawbacks in the breadth and depth of the channel, especially in the *specialization of work*. From the form of consignment sale channels, the type of domestic fund sale channels is not abundant, and the number of them is relatively limited. There is no pension fund and the mutual fund supermarket in a real sense. Because of the fact that pension is an important source of capital for American mutual funds, ICI listed it as a separate channel. China is clearly lacking in this side. Although, some domestic commercial banks and brokers also proposed the concept of mutual fund supermarket, it does not have the typical characteristics of the US mutual fund supermarket. In the third-party sale channels, China lacks insurance companies, discount brokers, professional brokers, and other channels. In the depth of the channel, the domestic third-party intermediary sales and service model has not fully developed yet. In the aspect of market segmentation, by contrast, the United States has obvious advantages in sale channels and service system. In China, some investment advisors have accessed to the qualification of fund sales, but they are limited by the number of sites and customer resources, whose fund sales business has not been recognized by the market. There is no outsourcing business of fund

sales in China, because specialization has not reached such a deep-going degree. Moreover, the domestic lacks a lot of *financial advisers* who possess professional level and quality.¹⁴

5.3 The total size of the fund market

Chart 5.1 Comparison of US and China's fund markets in 2015(trillion)



Source: <http://www.icifactbook.org> <http://www.amac.org.cn/>

US situation: The size of the US fund is \$18.1 trillion. Open-end funds: \$15.7 trillion. Close-end funds: \$2.1 trillion. ETF funds: \$261 billion. Unit investing trusts: \$94 billion. The total market value of US securities market by the end of 2015 is: 25.07 trillion US dollars. Fund market / securities market value = 70%.

China situation: China's fund size: ¥ 8.4 trillion. Open-end funds: ¥ 8.2 trillion. Closed-end funds: ¥ 1947.72 billion. The total market value China's securities market by the end of 2015 is: ¥ 53 trillion. Fund market / securities market value = 15%.

Through the fund asset size and the ratio of the size of the securities market, China's securities market participants, the proportion of investment institutions compared to abroad is still relatively small. If the pace of development in accordance with the United States, China's public offering funds would have developed to 40 trillion scale potentially.

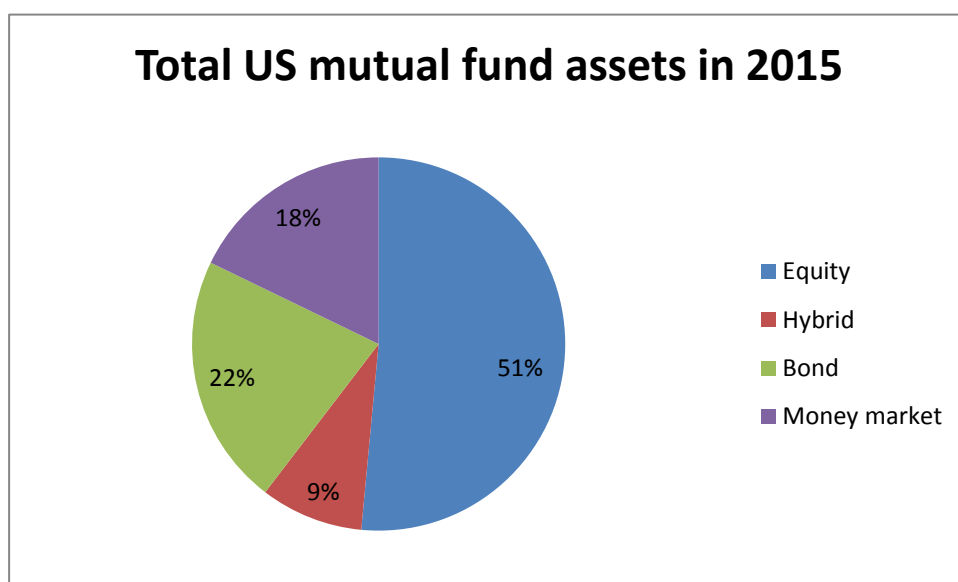
The 2015 investment company profile showed that the total assets of the global open-end

¹⁴ Reference: <http://www.galaxyasset.com/articlefilepath/jjxsqd.pdf>

fund in 2015 reached \$37.2 trillion dollars. Among them, the *US market* accounted for the highest, it was 48%, and mutual fund and ETF market asset are \$15.9 trillion dollars. Secondly, the European market accounted for more than 34%, Africa and the Asia-Pacific accounted for 13%, the other countries accounted for 5%. According to the China's Fund Industry Association data, at the end of 2015, the open-end funds that China's public fund managed (including equity funds, hybrid funds, money market funds, bond funds and QDII Fund) worth 8.2 trillion Yuan, it is about \$1.2 trillion. According to this calculation, the US open-end fund market size is about 13 times as our country.

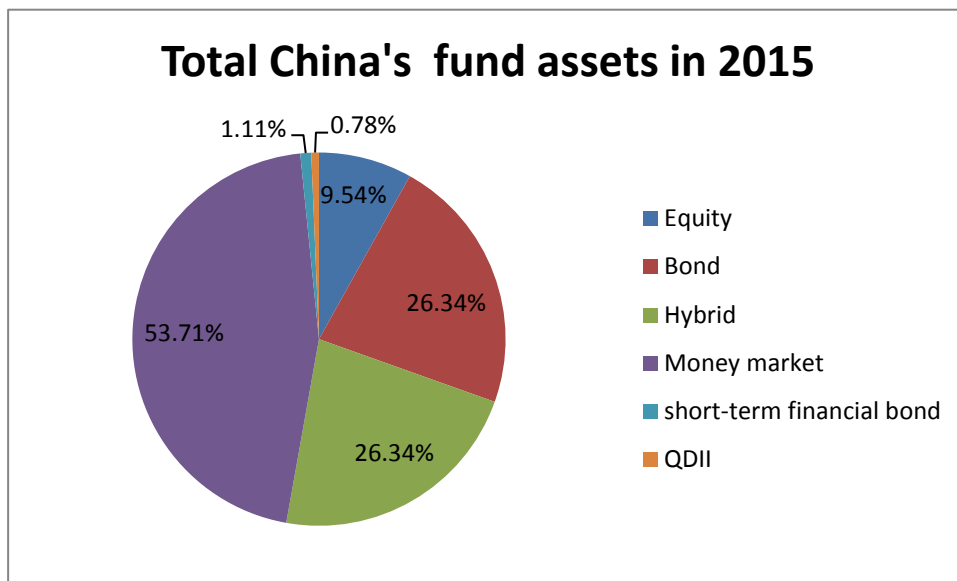
5.4 The proportion of mutual fund assets

Chart5.2 Total US mutual fund assets in 2015



Source: http://www.icifactbook.org/ch2/16_fb_ch2

Chart5.3 total China's fund assets in 2015



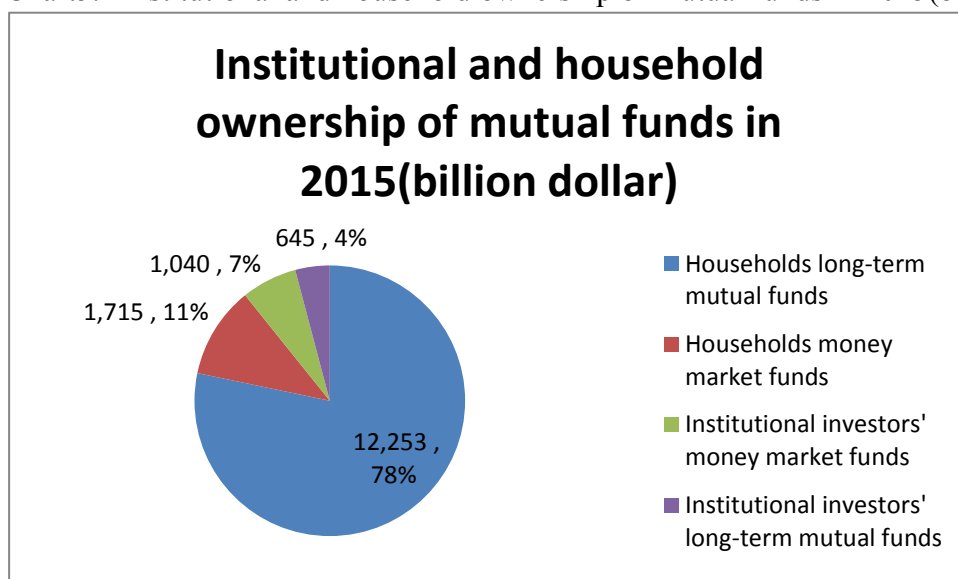
Source: <http://www.amac.org.cn/>

More than 50% of the fund assets in the US are equity funds. The proportion of equity funds in China's fund assets is only 9.54%, the future of equity funds has a larger developing space, of course, on the premise of stable development of the stock market, and the maturity of retail investors. It is also evident that Chinese investors prefer low-risk products, which may be a concern for many financial institutions.

More than 50% of the fund's assets in China are money market funds. The proportion of money market funds in the United States is only 18%, the main reason is that the domestic currency market's rate of return is higher, at same time; it has strong linkage with the Yu'E Bao industry and similar industry becoming popular. It is an opportunity.

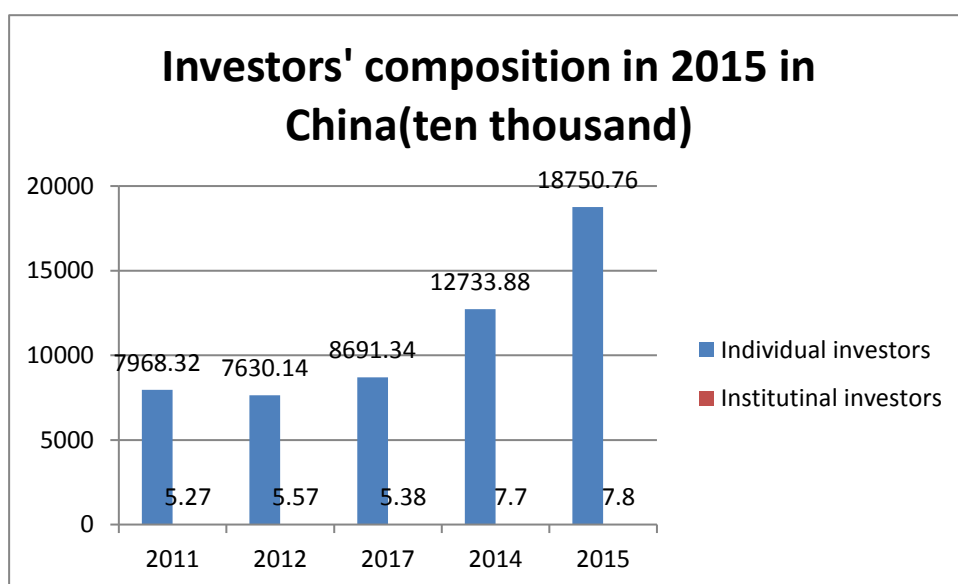
5.5 The composition of the fund holder

Chart5.4 Institutional and household ownership of mutual funds in 2015(billion)



Source: http://www.icifactbook.org/ch2/16_fb_ch2

Chart5.5 Investors' composition in 2015 in China (ten thousand)



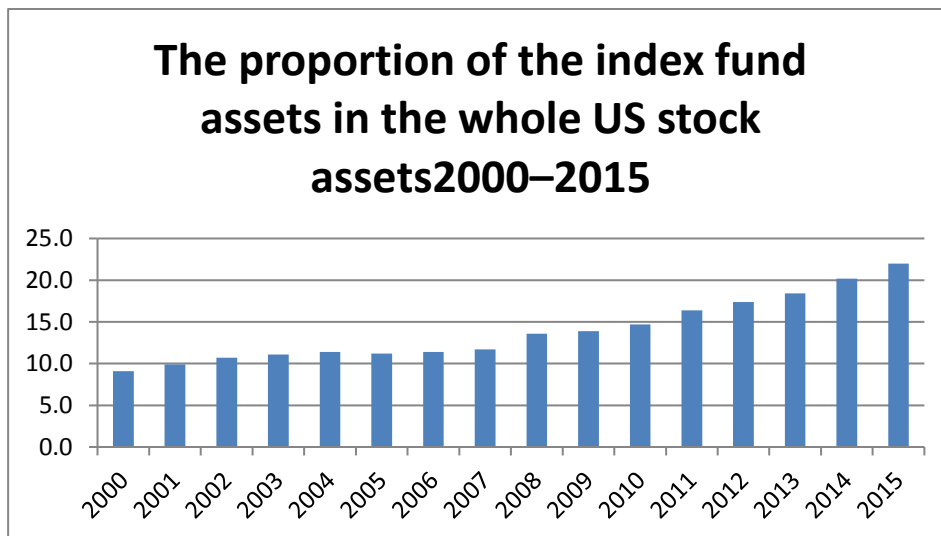
Source: http://www.icifactbook.org/ch2/16_fb_ch2

In China. Statistics show that between 2013 and 2014, the proportion of individual investor holding fund assets remained at around 70%, however, at the end of 2015, the proportion of institutional fund-holding assets had risen to 57.7%, and became the main investor in public offering fund. To sum up, the United States fund holders are mainly the family holders, including a variety of retirement schemes, accounted for more than 75%.

There are more than 70% personal investors in China in 2013, but something changes in 2015, it resulted in the institutional investors hold more funds than individuals, and becoming the main investor in public funds.

5.6 The proportion of the index fund assets in the whole stock assets

Chart 5.6 the proportion of the index fund assets in the whole stock assets2000–2015



Source: http://www.icifactbook.org/ch2/16_fb_ch2

Chart 5.7 Passive index fund size in China



Source: <http://www.qianzhan.com/qzdata/>

The U.S. index fund has risen annually in equity-fund assets, the index fund asset has reached to 22% at the end of 2015, the fund size is about 290 billion, in which the index fund

size accounts for only 4.5%, as it is shown in Chart 5.7, in the first quarter of 2015, the index fund size suddenly rose up, it's the highest in the history data, it is 8.12%, but decreased rapidly in three months, compared with 22% in USA, it's still small, the origin that the index fund proportion in 2015 has changed very violent is the stock market disaster in May 2015. Since 2014, China's A shares market have changed a lot. In 2014, the Shanghai Composite Index rose 53%, the Shenzhen Composite Index rose 34%, run faster than the global stock market. At beginning of 2015, the stock market soared and can't get controled. From December 31, 2014 to June 12, 2015 nearly 5.5 months, the Shanghai Composite Index jumped 60%, and the Shenzhen Composite Index is soaring 122%. Shanghai Stock Exchange Composite stock index on June 12 reached 5178.19 points, then sharply fell, fell to 2850.71 points on August 26, Hushen 300 index also jumped from June 9th 5380.43 Point to August 26th 2952.01 points, the Shanghai Composite Index and the Hushen 300 index sharply fell to 45% in two months, The stock price index of Shenzhen Stock Exchange also jumped from June 15th 18211.76 points to September 15th 9259.65 points, the Shenzhen Composite Index fell nearly one half in three months

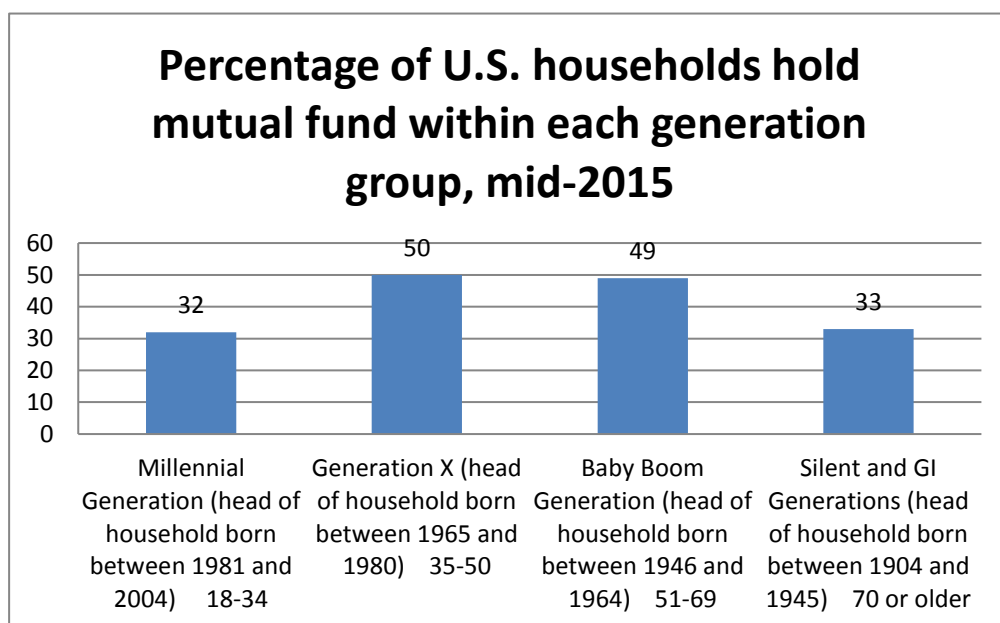
The reason why stock market changed insteady are the following points, Firstly, *the real economy faces pressure*, especially in *manufacturing industry*. On April, HSBC China's manufacturing industry purchasing managers index is 48.9, below the bad line 50. On May, HSBC China's manufacturing industry purchasing managers index rose to 49.1, but was less than expected of 49.3. Economists express the data show that the manufacturing industry's future is getting worse, the outputs fell for the first time since 2015, demand is weak domestic and foreign, and companies cut outputs to face declining demand, and deflationary pressures are relatively strong, and the price of output and input continues to drop. The June Service Purchasing Manager index (PMI) of HSBC China's statistics dropped to 51.8. The output index of the integrated manufacturing industry and services industry dropped to 50.6, it is the lowest in 13 months, demand is poor and economy slowdown . In addition, the new service industry index of June dropped to 52.2, affected by the depressed market conditions; secondly, the local debt situation is poor. May 18, 2015, Jiangsu Province issued the first 52.2 billion RMB local debt, which contains a replacement bonds 30.8 billion yuan, new general bonds 21.4 billion yuan; thridly, on June 9, 2015, MSCI(Morgan Stanley Capital International)

politely refused to accept China A shares. MSCI issued a news that it is expected to incorporate China A shares into its global benchmark index after some important issues such as market access are settled. The MSCI and China Securities Regulatory Commission will set up a working group to tackle these problems.

All in all, as for China's index fund, the index fund as a passive investment product, because the simple cost is low, and can follow the market overall earnings to obtain the investor's approval. It is also a good variety of investment. Compared to more than 22% scale of USA, the index fund in the stock fund assets accounted for very low ratio, index funds as passive investment products still have a greater potential.

5.7 Investors' age

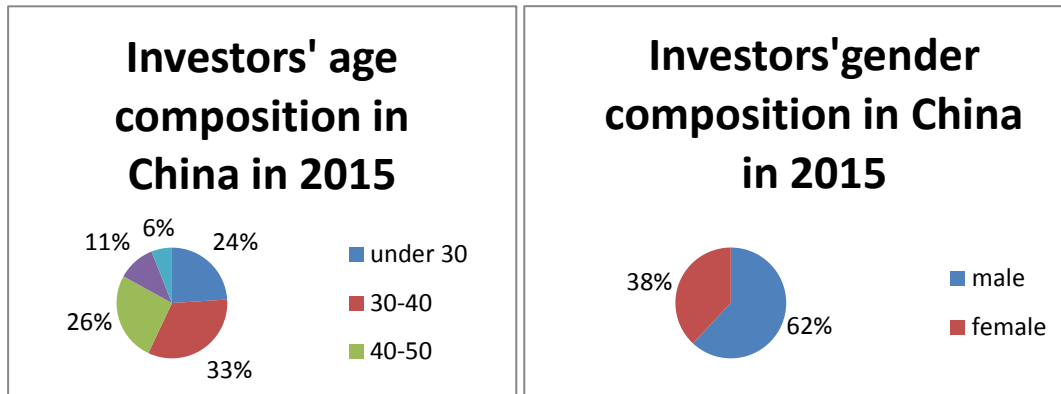
Chart 5.8 Percentage of U.S. households hold mutual fund within each generation group, mid-2015



Source: http://www.icifactbook.org/ch6/16_fb_ch6

Chart 5.9 Investors' age composition in China in 2015

Chart 5.10 Investors' gender composition in China in 2015



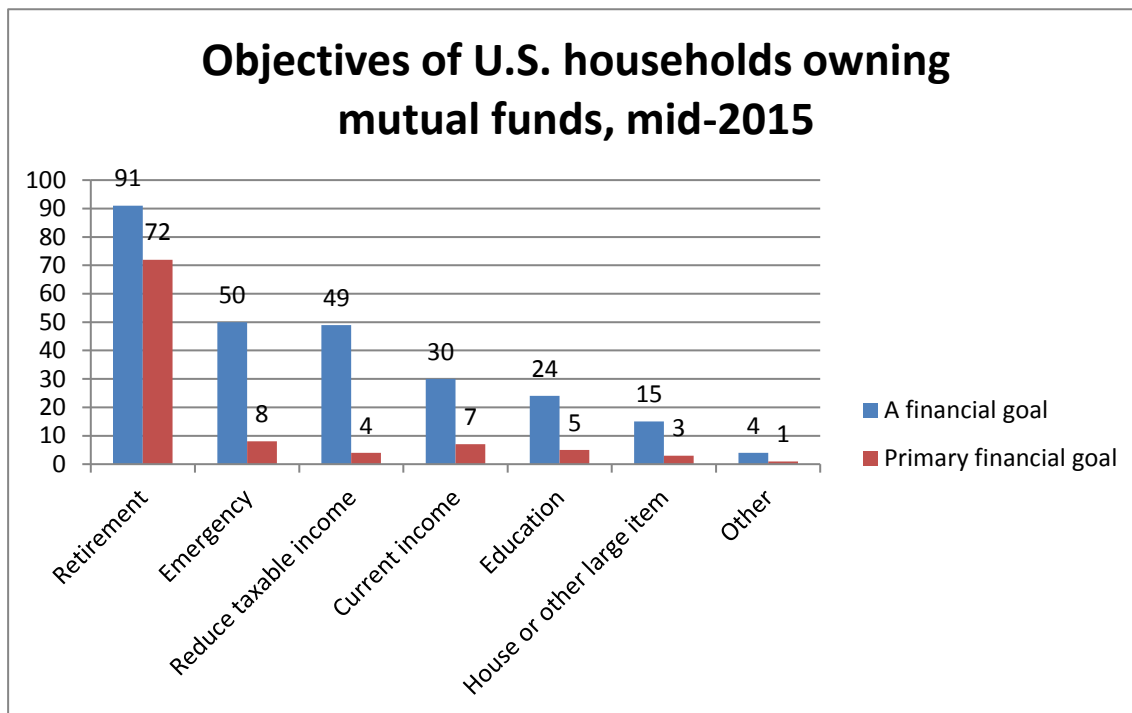
Source: <http://www.amac.org.cn/>

The main American fund investors are 35-70 years old, and there are only 32% of all millennial generation in USA, Investors under the age of 30 in China have a certain proportion and the main investment groups are 30 years old-50 years old, and most of investors are male, therefore, we can also infer that male are more likely to take risk, female are more conventional in China, however, in USA, both female and male are willing to buy fund, it is very common in USA, on the other side, we can infer that USA's fund market is very mature and complete.

In summary, investors are associated with the personal possession of assets, financial awareness, only when the user has a certain investment assets and financial awareness, investment has possibility to happen.

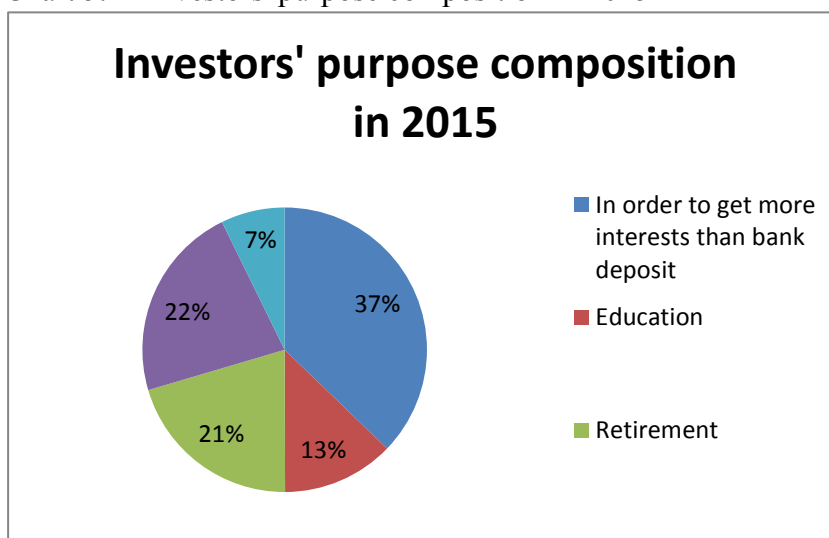
5.8 Investors' objectives

Chart 5.11 Objectives of U.S. households owning mutual funds, mid-2015



Source: http://www.icifactbook.org/ch6/16_fb_ch6

Chart 5.12 Investors' purpose composition in 2015



Source: <http://www.amac.org.cn/>

The main purpose of American fund investors buying fund are *pension*, emergency, tax reduction, income and other factors. Inside, the retirement is the primary factor, which shows that American people pay more attention to pension, they concern about future, the main purpose of China's investors buying fund are: in order to *get higher returns*, spread risks,

pension, education, it means that Chinese people concern about higher yield, their pension consciousness is weaker than American. Actually, not all investment's goal is to gain immediate benefits, different users, different situation, have different demand for investment, financial management, only when the financial purpose is not simply for getting interests, we can grasp more potential business opportunities, this is what China should learn from US, the difference between Chinese and American investors' investment purposes may provide some inspiration for China to study the needs of investors and personalize customized products.

5.9 Summary of the comparison of collective investment in China and in USA

China's fund industry is a new-developing industry, on the contrary, USA's fund market is mature and complete, compares two countries, and we can make some comparison.

5.9.1 Comparison of collective investment in China and in USA

US fund market mainly trades equity funds; China's fund market mainly trades money market funds; the investors of funds are mainly family holders, it can also be individual holders, but as for China, at the end of 2015, the institutional holders surpass individual holders; the index funds increase year in year in US and reach 22% at the end of 2015, in terms of China, it not always increasing, its unstably and hard to expect; investor's age are 35-70 in US, 30-50 in China; the purpose is also different, American buy funds for their pension plans, Chinese buy funds for making profit, although their purpose are different, they both buy funds for their demand. In a word, compared with USA, China's fund industry still has a long way to experience. There is an example of comparison of selected corporate bond fund in China and in USA in annex, more information can be found in annex 4.

Collect the important parts of chapter 5, there is a table that briefly describes the comparison of collective investment in China and in USA.

Table 5.4 Brief comparison of collective investment in China and in USA

	China	USA
Origin	China's first open-end fund Hua'an created in 2001	Massachusetts investment trust funds was set up in 1924
Holder (mainly)	Institution	Industrial
Main trading	Money market funds	Equity funds
The main investors' age	30-50	35-70
Buying motive	In order to get higher returns,	Pension plans
Means of selling	Direct selling, commercial bank, securities dealer	Direct selling, enquiry agencies, pension funds, supermarket, institutional investor
Fee management	Rate is confirmed by administrative means, no rule for fund holder to derivative litigation, information disclosure has no format	Rate can be confirmed by agreement with both sides, Investors can apply for judicial remedy if the rate is unreasonable, information disclosure perfection
Investors' personality	Investors are easy to be influence by the herd effect, anti-risk capability is low	Risk capability is strong, resisting ability strong
Pension consciousness	Weak	strong

5.9.2 Some lessons China can learn from USA

Through the comparison of China and US funds, there are three parts that China can learn from America.

Firstly, increase the level of competition in the investment fund industry, because the survival of the fittest. China's fund industry's market economy can develop effectively, there are some solution how to increase the level of competition in the investment fund industry:

enrich the variety and type of investment funds, increase the amount of investment funds, pay more attention to the development of open-end funds, actively develop domestic and foreign cooperative investment fund.

Secondly, improve the internal management of the investment fund industry, China can improve management through improving the management level of the fund management company's manager, including make investment strategy flexibility, improve the level of service, reduce investment cost appropriately; establish a independent director system; improve the internal governance of the investment fund industry.

Thirdly, improve the legal supervision of investment funds, such as prevent cheating and fraud, strengthen of disclosure of open information. on the one hand, China should learn from USA's successful experience, one the other hand, China should build an investment fund development model and regulatory system that suit for itself based on it actual economic situation.

6. Conclusion

The object of this thesis is comparing the collective investment in China and in USA. Then find out the difference, and get results.

In the contents, it was divided into five parts. In the first part, it introduced the definition of collective investment, and its history, the collective investment's varieties, and the characteristics and distinctions of collective investment, how to raising fund and the risk of collective investment. In the second part and third part, and it described China and USA's collective investment market industry, and described the history and origin of collective investment.

The fourth part was the core of the thesis. In this part, it compared the collective investment between China and USA through the fund fees, marketing channel, total size of the fund market, the proportion of mutual fund assets, the composition of fund holder, the proportion of index fund assets in the whole stock assets, investors' age and investors' objectives.

The result is that China's fund industry as a new-developing industry has many shortcomings. For example, internal supervision and regulation system is imperfect, securities investment funds laws and regulatory systems are not sound, people's investment awareness needs to be improved. On the one hand, China should learn successful experience from USA, for example, increase the level of competition in the investment fund industry, improve the internal management of the investment fund industry, and improve the legal supervision of investment funds, one the other hand, China should build its own regulatory system based on its economic situation.

Bibliography

1. BOGLE, John C. *Common Sense on Mutual Funds*. London: Wiley, 2009. 607 p. ISBN 978-0470138137.
2. CECCHETTI, Stephen and Kermit SCHOENHOLTZ. *Money, Banking, and Financial Markets*. New York: McGraw-Hill, 2014. 752 p. ISBN 978-0078021749.
3. RUSSELL, Ray. *An Introduction to Mutual Funds Worldwide*. London: Wiley, 2007. 198 p. ISBN 978-0470062036.
4. BROBY, Daniel. *A guide to fund management*. London: Risk Books, c2010. ISBN 978-1906348182.
5. QINGQUAN, Ma. *China Fund Industry*. China: Finance Publishing House, 2014. ISBN 978-7504972477.

Electronic Bibliography

6. Baidubaike. Mutual Funds. [Online]. [05.01.2016]. Available on http://baike.baidu.com/link?url=J23JA4KQkZpMLwPCZQUtCzX95o8FT9FWBn7mAs8AYf0XXOvkSzI0iBzg2vrZl4CazXTaOsGKEDxIF-oMvVpmD_
7. Management Association of China. History of Mutual Funds. [Online]. [10.02.2016]. Available on <http://www.amac.org.cn/>
8. China's Securities Investment Fund Industry Report in 2015. [Online]. [13.01.2017]. Available on <http://www.amac.org.cn/xydt/xyxx/>
9. 2016 Investment Company Fact Book. [Online]. [4.05.2016]. Available on <https://www.ici.org/research/stats/factbook>
10. Wikipedia. Securities Investment Fund. [Online]. [04.12.2011]. Available on <https://zh.wikipedia.org/wiki/%E8%AF%81%E5%88%B8%E6%8A%95%E8%B5%84%E5%9F%BA%E9%87%91>

List of Abbreviation

NASD: National Association of Securities Dealers

ICI: Investment Company Institute

SEC: U.S. Securities and Exchange Commission

AMAC: Assets Management Association of China

SSE: Shanghai Security Fund

QDII: Qualified Domestic Institutional Investors

HSBC: Hong Kong and Shang Hai Banking Corporation

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List of Annexes

Annex 1: Net assets of worldwide regulated open-end funds

Annex2: The general situation of China's investment funds

Annex3: The general situation of China's open-end funds

Annex4: Example--- Comparison of selected corporate bond fund in China and in US

Annex 1: Net assets of worldwide regulated open-end funds

Billions of US dollars

	2015				2016			
Quarter	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
All funds	38,366	39,201	37,026	38,156	38,837	39,286	40,842	40,364
Long-term	33,818	34,617	32,184	33,083	33,775	34,295	35,796	35,334
Equity	16,845	17,003	15,374	16,187	16,159	16,298	17,096	17,113
Bond	8,394	8,479	8,185	8,111	8,488	8,809	9,210	8,941
Balanced/ Mixed	5,045	5,421	5,049	5,162	5,227	5,294	5,458	5,323
Guaranteed	96	86	79	74	73	69	68	67
Real Estate	491	523	525	532	563	582	598	596
Other	2,947	3,106	2,971	3,017	3,264	3,243	3,366	3,295
Money market	4,548	4,584	4,843	5,072	5,063	4,991	5,046	5,030

Annex2: The general situation of China's investment (Part 1)

Year	Number of Funds(unit)			Fund Units(100 million units)		
	Total	Close-ended Funds	Open-ended Funds	Total	Close-ended Funds	Open-ended Funds
2004	161	54	107	3 308.79	817	2 491.79
2005	218	54	164	4 714.18	817	3 897.18
2006	307	53	254	6 220.67	812	5 408.67
2007	346	36	310	22 339.84	844.14	21 495.70
2008	439	33	406	25 741.78	890.32	24 851.46
2009	547	31	516	23 518.55	945.02	22 573.53
2010	704	39	665	23 955.33	1 119.80	22 835.53
2011	914	57	857	26 510.37	1 371.32	25 139.05
2012	1 173	68	1 105	31 708.41	1 424.85	30 283.56
2013	1 551	130	1 421	31 167.18	1 953.94	29 213.24
2014	1 899	135	1 764	42 032.7	1 256.71	40 776.00
2015	2 722	164	2 558	76 674.13	1 669.54	75 004.59

Annex2: The general situation of China's investment (Part 2)

	Fund Asset Value(100 million Yuan)		
Year	Total	Close – ended Funds	Open – ended Funds
2004	3 246.34	809.71	2 436.63
2005	4 691.38	822.17	3 869.21
2006	8 565.05	1 623.64	6 941.41
2007	32 762.32	2 442.17	30 320.15
2008	19 403.25	758.95	18 644.30
2009	26 024.80	1 238.78	24 786.02
2010	25 040.86	1 299.00	23 741.86
2011	21 918.55	1 234.15	20 684.40
2012	28 661.81	1 413.01	27 248.80
2013	30 011.54	1 987.56	28 023.98
2014	45 374.30	1 366.81	44 007.49
2015	83 971.83	1 947.72	82 024.11

Annex3: The general situation of China's open-end funds (Part 1)

	Equity fund			Hybrid fund		
Year	Number	Shares(100 million)	Size(100 million Yuan)	Number	Shares(100 million)	Size(100 million Yuan)
2008	162	10 866.30	7 242.57	138	7 395.81	5 193.09
2009	239	12 454.50	13 702.50	158	6 692.64	7 478.45
2010	332	12 945.64	13 214.94	166	6 651.08	7 300.67
2011	439	13 548.16	10 421.59	191	6 736.21	5 671.22
2012	538	13 598.55	11 564.46	217	6 467.76	5 619.47
2013	610	11 794.06	11 026.24	288	5 917.75	5 624.77
2014	699	10 772.46	13 142.02	395	5 525.28	6 025.23
2015	587	5 988.13	7 657.13	1 184	17 948.31	22 287.25

Annex3: The general situation of China's open-end funds (Part 2)

	Bond fund			Money market fund		
Year	Number	Shares(100 million)	Size(100 million Yuan)	Number	Shares(100 million)	Size(100 million Yuan)
2008	61	1 745.23	1 880.36	40	3 891.73	3 892.43
2009	81	765.82	839.37	43	2 581.41	2 581.41
2010	103	1 359.03	1 449.76	46	1 532.77	1 532.78
2011	140	1 380.82	1 401.85	51	2 948.85	2 948.86
2012	233	3 823.86	3 922.43	62	5 722.40	5 722.41
2013	346	3 260.97	3 309.02	94	7 475.74	7 475.93
2014	409	3 048.65	3 482.28	171	20 804.36	20 862.43
2015	466	5 895.92	6 973.84	220	44 371.59	44 443.36

Annex3: The general situation of China's open-end funds (Part 3)

	QDII		
Year	Number	Shares(100 million)	Size(100 million Yuan)
2008	10	1 094.01	522.41
2009	10	1 017.35	742.24
2010	28	940.5	735.5
2011	51	913.45	576.02
2012	67	875.46	632.02
2013	83	764.71	588.02
2014	90	625.26	495.54
2015	101	800.64	662.53

Annex 4: An example--- Comparison of selected corporate bond fund in China and in US

This part introduces two corporate bond funds, one is (121001), this number is code of fund, the full name is: UBS financial China's bond fund, it's is a good bond fund in China, and have great interest in the past three years, the interest of this bond fund always comes out top, and data is integrity, that's why author choose this bond fund, the second one is (PYACX), (PYACX) is a corporate bond fund in US, the full name is: Payden Corporate Bond Fund, it's also g good fund, and ranking in the top. In the following content, author use abbreviation instead full name.

UBS financial China's bond fund Versus Payden Corporate Bond Fund

(121001) the fund was established on 16 April, 2003, the first offering size is 2.889 billion Yuan, until 15 May, 2017, its asset size reached 0.479 billion Yuan, the constituent are 50.81% bond, 37.83% stock, 6.28% bank deposit, 5.08% others, the Morningstar rating evaluate (121001) it four star bond fund, Morningstar risk is 11.5, it's a little high, it means this bond funds rate of return has possibility to drop down, sharp rate is 0.84 in three years, it means excess returns is low, the fund holders are mostly individual investors, until 31, December 2016, the number of individual investors are 0.267 billion. Its net asset value is 1.7409 Yuan. Fund management fee is 0.75%, custody fee is 0.20 %.¹⁵

Table 4.1 the composition of (121001)

Type	
Stocks	37.83%
Bank deposit	6.28%
Bonds	50.81%
Others	5.08%

Source: <http://fund.eastmoney.com/121001.html>

¹⁵ Reference: <http://fund.eastmoney.com/121001.html>

Table 4.2 (121001) fund situation

	From this year	One week until now	One month until now	Three month s until now	Six months until now	One year until now	Two years until now	Three years until now
Return rate	1.12%	0.90%	-1.18%	3.23%	0.45%	12.61 %	4.30%	12.61%
Ranking	169/147 9	8/169 2	1582/166 1	2/1537	200/125 4	2/974	556/77 2	29/664

Source: <https://www.howbuy.com/fund/121001/#jjda>

From Table4.2, we know that this year the rate of return was gradually increasing (121001), and its net asset value is 1.7409 Yuan.

(PYACX): The investment seeks a high level of total return that is consistent with preservation of capital. The fund invests in a wide variety of debt instruments and income-producing securities. Under normal market conditions, the fund invests at least 80% of its total assets in corporate bonds or similar corporate debt instruments. In addition, in order to gain exposure to corporate debt markets, the fund may use derivatives to a significant extent, including in particular, credit default swaps with respect to individual corporate names and with respect to various credit indices. the Morningstar rating evaluate five stars, (PYACX)'s net asset value is 11.1 dollars, total net assets is \$ 149,583,705, fund holders are mainly companies, administrative fee is 0.15%, management fee is 0.35%,sharpe ratio is 1.256%.¹⁶

¹⁶ Reference:<http://money.usnews.com/funds/mutual-funds/corporate-bond/payden-corporate-bond-fund/pyacx>

Table 4.3 the composition of (PYACX)

Type	% Net	% Short	% Long
Cash	-2.56	4.09	1.52
US Stocks	0	0	0
Non US Stocks	0	0	0
Bonds	100.62	19.75	120.38
Other	1.94	0	1.94

Source: <http://money.usnews.com/funds/mutual-funds/corporate-bond/payden-corporate-bond-fund/pyacx/performance>

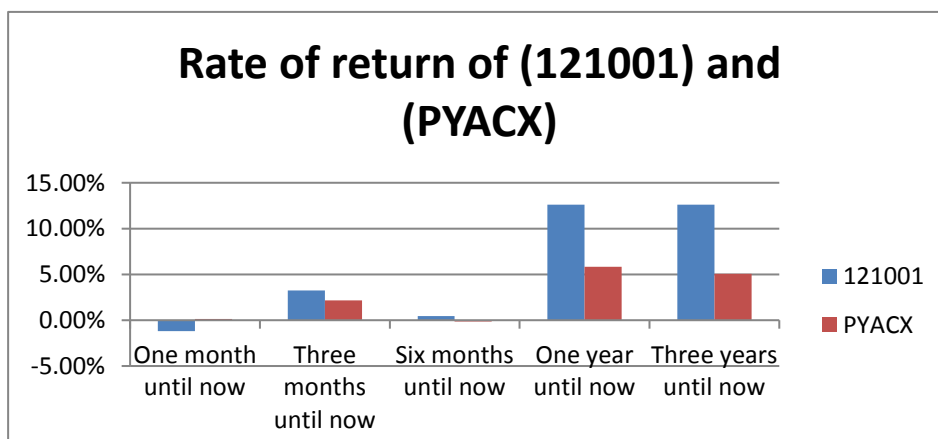
Table 4.4 (PYACX) fund situation

	One month until now	Three months until now	Six months until now	One year until now	Three years until now
Return rate	0.12%	2.17%	-0.15%	5.83%	5.08%
Ranking	8	6	19	25	

Source: <https://www.morningstar.com/funds/xnas/pyacx/quote.html>

The fund has returned 5.83 percent over the past year, 5.08 percent over the past three years, and 5.49 percent over the past five years. And the ranking is good. Compare the rate of return of two corporate bond funds; we can get following Chart 4.5.

Chart 4.5 Rate of return of (121001) and (PYACX)



Source: <https://www.morningstar.com/funds/xnas/pyacx/quote.html>

<https://www.howbuy.com/fund/121001/#jjda>

as is shown in the chart, (121001) has higher rate of return than (PYACX), but according to the Sharpe ratio, (121001)'s Sharpe ratio is 0.84%, (PYACX)'s Sharpe ratio is 1.256%, the Sharpe ratio means that the higher the funds, the higher the excess returns, on the other words, although (PYACX)'s rate of return is lower than (121001), because (PYACX) is more risky than (121001), it still has possibility to get better return,

As for the management fees, (121001) is 0.75%, (PYACX) is 0.35%, the management fee of (121001) is nearly double of (PYACX).

As for holders composition, most of (121001)'s holders are individual investors, on the contrary, most of (PYACX)'s holders are companies including transnational corporation.